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SUPERIOR COURT OF THE STATE OF CALIFORNIA

FOR THE COUNTY OF ALAMEDA

CENTER FOR BIOLOGICAL DIVERSITY, and SIERRA CLUB, non-profit corporations,

Petitioners,

vs.

CALIFORNIA DEPARTMENT OF CONSERVATION, DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES; and DOES 1 through 20, inclusive,

Respondents.

AERA ENERGY LLC, BERRY PETROLEUM COMPANY LLC, CALIFORNIA RESOURCES CORPORATION, CHEVRON U.S.A. INC., FREEPORT-MCMORAN OIL & GAS LLC, LINN ENERGY HOLDINGS LLC, and MACPHERSON OIL COMPANY,

Respondents-in-Intervention.

Case No. RG15769302

Assigned for all purposes to the Hon. George C. Hernandez, Dept. 17

APPENDIX OF SUPPORTING EVIDENCE TO THE DECLARATION OF MATTHEW WICKERSHAM IN SUPPORT OF MOTION FOR SUMMARY ADJUDICATION BY AERA ENERGY LLC, BERRY PETROLEUM COMPANY LLC, CALIFORNIA RESOURCES CORPORATION, CHEVRON U.S.A. INC., FREEPORT-MCMORAN OIL & GAS LLC, LINN ENERGY HOLDINGS LLC, AND MACPHERSON OIL COMPANY

[*Motion, Declaration of Matthew Wickersham, and Separate Statement, filed concurrently; Proposed Order, lodged concurrently*]

Action Filed: May 7, 2015
Trial Date: None set

INDEX OF APPENDIX OF SUPPORTING EVIDENCE

EXHIBIT NO.	DOCUMENT
A	Title 40, Section 147.250 of the Code of Federal Regulations.
B	March 2, 2015 California Environmental Protection Agency memorandum titled "CalEPA Review of UIC Program".
C	February 6, 2015 letter from Steve Bohlen, State Oil and Gas Supervisor, and Jonathan Bishop, Chief Deputy Director of the State Board, to Jane Diamond, the Director of The Water Division at the EPA Region IX.
D	April 2, 2015 press release from DOGGR titled "California Department of Conservation Issues Notice of Emergency Regulations for Underground Injection.
E	Complaint for Declaratory and Injunctive Relief and Verified Petition for Writ of Mandate dated May 7, 2015.
F	Excerpted portions of Reporter's Transcript of Proceedings from the hearing on July 2, 2015.
G	Excerpted portions of Reporter's Transcript of Proceedings from the hearing on September 39, 2015
H	Court Order dated July 16, 2015
I	Updated Joint Complex Case Management Statement dated December 2, 2015

EXHIBIT A

Code of Federal Regulations
Title 40. Protection of Environment
Chapter I. Environmental Protection Agency (Refs & Annos)
Subchapter D. Water Programs
Part 147. State, Tribal, and EPA–Administered Underground Injection Control Programs (Refs & Annos)
Subpart F. California

40 C.F.R. § 147.250

§ 147.250 State-administered program—Class II wells.

Currentness

The UIC program for Class II wells in the State of California, except those on Indian lands, is the program administered by the California Division of Oil and Gas, approved by EPA pursuant to SDWA section 1425.

(a) Incorporation by reference. The requirements set forth in the State statutes and regulations cited in this paragraph are hereby incorporated by reference and made a part of the applicable UIC program under the SDWA for the State of California. This incorporation by reference was approved by the Director of the Federal Register on June 25, 1984.

(1) California Laws for Conservation of Petroleum and Gas, California Public Resources Code Div. 3, Chapt. 1, §§ 3000–3359 (1989);

(2) California Administrative Code, title 14, §§ 1710 to 1724.10 (May 28, 1988).

(b) The Memorandum of Agreement between EPA Region IX and the California Division of Oil and Gas, signed by the EPA Regional Administrator on September 29, 1982.

(c) Statement of legal authority.

(1) Letter from California Deputy Attorney General to the Administrator of EPA, "Re: Legal Authority of California Division of Oil and Gas to Carry Out Class II Injection Well Program," April 1, 1981;

(2) Letter from California Deputy Attorney General to Chief of California Branch, EPA Region IX, "Re: California Application for Primacy, Class II UIC Program," December 3, 1982.

(d) The Program Description and any other materials submitted as part of the application or as supplements thereto.

Credits

[52 FR 17681, May 11, 1987; 56 FR 9412, March 6, 1991]

SOURCE: 49 FR 20197, May 11, 1984; 50 FR 28942, July 17, 1985; 52 FR 17680, May 11, 1987; 53 FR 43086, 43104, Oct. 25, 1988; 73 FR 63646, Oct. 27, 2008, unless otherwise noted.

AUTHORITY: 42 U.S.C. 300h et seq.; and 42 U.S.C. 6901 et seq.

Current through Nov. 25, 2015; 80 FR 73678.

End of Document

EXHIBIT B

CalEPA
California Environmental
Protection Agency

Edmund G. Brown Jr.
Governor

Matthew Rodriquez
Secretary for Environmental Protection

MEMO: CalEPA Review of UIC Program

TO: Cliff Rechtschaffen, Senior Advisor
Office of the Governor

John Laird, Secretary
California Natural Resources Agency

FROM: Matthew Rodriquez, Secretary
California Environmental Protection Agency

DATE: March 2, 2015

For the last eight months, the State of California, through the Division of Oil, Gas & Geothermal Resources (DOGGR) and the State Water Resources Control Board (State Water Board), and in coordination with the United States Environmental Protection Agency (U.S. EPA), has been systematically reviewing thousands of wastewater disposal and enhanced oil recovery wells to determine their proximity to water supply wells and the potential for contamination of any drinking water. Where the risk of contamination is unacceptable, the State has ordered and will continue to order those wells be shut in. As of early February 2015 the State has identified approximately 2,500 wastewater disposal and enhanced oil recovery wells injecting into potentially non-exempt zones, 2,100 of which are still active. Of these, there are approximately 140 active wastewater disposal wells injecting into aquifers with Total Dissolved Solids (TDS) less than 3,000 mg/l, a key indicator under the federal Safe Drinking Water Act (SDWA) of higher quality water. (DOGGR regulates over 50,000 oilfield injection wells in California.) To date, preliminary water sampling of select, high-risk groundwater supply wells has not detected any contamination from oil production wastewater.

Three years ago, DOGGR notified U.S. EPA that discrepancies and confusion concerning 30-year-old agreements by which the federal government granted the State regulatory authority over wastewater disposal wells likely led to the permitted injection of oil production wastewater into aquifers that are or could become sources of drinking water. In some cases, this occurred due to conflicting documentation, both in California and with the federal government, as to whether 11 aquifers were exempted from regulation when the State received authority from U.S. EPA to implement the Underground Injection Control (UIC) program of the Safe Drinking Water Act. In other cases, this permitting and injection occurred due to confusion over the precise borders of aquifers that had been authorized for injection.

In June 2014 the Governor's Office requested that the California Environmental Protection Agency (CalEPA) perform an independent review of the state's Underground Injection Control Program, as administered by DOGGR over the decades, to better understand how this occurred. This memo presents CalEPA's findings.

Background

The federal Safe Drinking Water Act was enacted in 1974 to protect public health by regulating the nation's public drinking water and its sources. Pursuant to the SDWA, U.S. EPA

promulgated regulations creating an Underground Injection Control Program to protect from contamination aquifers that are, or could become, potential sources of drinking water.

In 1981, California's Division of Oil and Gas (DOG[1]) applied to U.S. EPA to become the primary enforcing agency of the UIC portion of the SDWA in California; DOG was granted primacy over the program in 1983. As part of the application process, DOG proposed to exempt certain aquifers from regulation under the UIC Program (so-called "exempt aquifers") because they were not, and would not become, sources of drinking water. Most but not all of these proposed aquifers -- which were either hydrocarbon-producing (i.e. a source of oil or gas) or already being injected with oil production wastewater -- were exempted under a Memorandum of Agreement between DOG and U.S. EPA signed on September 28 and 29, 1982.

This first version of the Memorandum of Agreement (MOA1) expressly designated as non-exempt 11 aquifers that DOG had sought to exempt and required all existing injection wells into those aquifers to be phased out over 18 months. These non-hydrocarbon-producing aquifers all had a TDS concentration below 3,000 mg/l. However, all 11 were being used at the time of the Primacy Application for wastewater disposal and, even at that point, some had been injected into for decades.

As will be discussed below, at least by December 3, 1982, a second version of that Memorandum (MOA2) was being circulated between DOG and U.S. EPA *exempting* the 11 aquifers that had been *rejected* for exemption in the prior version. MOA1 and MOA2 were virtually identical, differing only in their treatment of the 11 aquifers and in the omission of one sentence from MOA2 requiring that injection in non-exempt aquifers be phased out within 18 months. Adding to the confusion, MOA2's signature page was photocopied from MOA1, so both documents share the same date and signatures. From the early 1980s on, DOG (then DOGGR) staff and U.S. EPA staff treated the list of exempt aquifers in MOA2 as correct; after a number of years, staff was no longer even aware of the fact that MOA1 had existed.

Further, under the terms of a 1983 interagency agreement (renewed in 1988) between the Department of Conservation (which oversaw DOG) and the State Water Board, the Regional Water Quality Control Boards were to review all well permit applications approved by DOG to ensure wastewater disposal would not degrade state waters. However, having other priorities and no dedicated staff or resources for an independent review, the Regional Boards generally deferred to DOGGR's determination of whether or not an aquifer was exempt without scrutinizing the applications.

DOGGR and U.S. EPA Agreed to Exempt the 11 Aquifers, But May Not Have Followed Regulatory Procedures

As discussed below, U.S. EPA and DOG agreed in the early 1980s to exempt the 11 aquifers and seemingly adopted MOA2 as the basis for permitting of wastewater disposal wells. Nevertheless, there are questions about whether this was done in accordance with federal UIC regulations. Procedurally, there is conflicting evidence as to whether MOA2 was approved as part of the state's initial Primacy Application in February 1983 or after an aquifer exemption appeals process in June 1983. There is also little evidence in the files of state and federal agencies justifying the decision to exempt the 11 aquifers in MOA2.

After representatives of DOG and U.S. EPA Region 9 signed MOA1 on September 28 and 29 (respectively), 1982, the agreement was forwarded to U.S. EPA's national office for review. The

[1] DOG was the precursor entity to DOGGR. The name change occurred in 1992.

national office returned the agreement, asking for changes. Notes from an internal U.S. EPA phone conversation indicate that the national office specifically requested that the 18-month phase-out of the injection wells in the 11 non-exempt aquifers be removed. The next version of the Memorandum sent by Region 9 to the national office for review, on December 13, was MOA2: the 18-month phase-out had been removed *and* the 11 non-exempt aquifers had been transposed into the list of exempt aquifers. In transmitting MOA2, Region 9 noted that "with the addition of these attachments, all known issues regarding the Primacy Application have been resolved." The national office submitted California's Primacy Application, including a version of the Memorandum, to the U.S. EPA Administrator for review, which was approved on February 4, 1983 (effective March 14, 1983). However, which version was transmitted to the Administrator, MOA1 or MOA2, is unknown.

The federal regulations[2] memorializing the delegation of UIC Primacy to DOG incorporate by reference the Memorandum signed on September 29, 1982; however, because MOA1 and MOA2 have identical signature pages it is unclear which version is being referred to. MOA2 is the last version of the Memorandum that DOG and Region 9 agreed to and presumably would have been the version transmitted to the Administrator. DOG files include a version of MOA1 with "VOID" handwritten across the top and strikethroughs of the 11 non-exempt aquifers that were ultimately exempted under MOA2. Similarly, U.S. EPA files include a version of MOA2 with asterisks indicating the 11 aquifers that had been newly exempted. This suggests MOA2 was adopted along with the transfer of UIC Program primacy.

In February and April 1983, however, DOG wrote oil operators injecting into the 11 aquifers to notify them the aquifers were not exempt and that they had 18 months to cease injecting. This would only be the case if MOA1 were correct (as MOA2 had exempted those aquifers). In June 1983 DOG wrote a second set of letters saying DOG's appeal of these aquifers' status to U.S. EPA had been successful, and they were now exempt. Aside from these representations, there is no evidence DOG put together an appeals packet with information justifying an exemption and transmitted it to U.S. EPA. Nor is there evidence that the procedures required to approve a post-primacy aquifer exemption were followed, which at minimum required the written approval of the Administrator and may have required a new public process and publication in the *Federal Register.*

Even more confusingly, during the two-month period when the "appeal" was apparently being considered, the Department of Conservation and the State Water Board signed their interagency agreement to review well permit applications, attaching for reference MOA2 as the valid agreement between DOG and U.S. EPA. Other documents similarly suggest that, despite the shut-down notice letters, the 11 aquifers had already been exempted per MOA2. Two February and March 1983 letters from oil producers expressed concern about one of the 11 aquifers being non-exempt; DOG district staff wrote across the top of both letters that "[t]his zone is exempted." A February 1983 summary of the responses to public comment regarding DOG's 1983 Primacy Application, found in U.S. EPA files, states that U.S. EPA approved "all but two" of the aquifers DOG had requested for exemption, short of the 11 listed in MOA1.[3]

Regardless of timing, by early or mid-1983 U.S. EPA and DOG appear to have agreed that MOA2 governed and the 11 aquifers were exempt. Both agencies treated the aquifers as exempt from that point through 2012, when DOGGR staff re-discovered MOA1 and notified U.S. EPA. For example:

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[2] 40 CFR §147.250 (1984).

[3] MOA2 listed no non-exempt aquifers, but DOG and U.S. EPA would discuss exempting two new aquifers in late 1983, which may have been the two referred to.

- An undated DOGGR letter, likely from 1983, includes a list of exempt aquifers and "recently" exempted aquifers that includes the 11 aquifers. This list would be periodically reissued by DOGGR management to district office staff into the 1990s.
- In 1984, U.S. EPA noted in the *Federal Register* that some parties were confused over which aquifers had been exempted in California and pledged that U.S. EPA Region 9 would maintain a public list of all exempt aquifers. The next year, in 1985, U.S. EPA wrote an oil producers association clarifying which aquifers had been exempted in California, attaching the list of exempt aquifers from MOA2, which included the 11 formerly non-exempt aquifers from MOA1.
- From at least the late 1980s through the 2010s, DOGGR's UIC Manual of Instruction, an injection well permitting manual issued to all the districts, also included a copy of MOA2.
- In 2011, an independent audit of DOGGR's UIC permitting program prepared at the request of U.S. EPA Region 9 included an attachment of MOA2 as the relevant agreement.

DOGGR Also Permitted Injection in Non-Exempt Zones

About half of the active wastewater disposal wells injecting into sub-3,000 mg/l TDS aquifers are injecting into the 11 aquifers that were listed as *non-exempt* in MOA1, but *exempt* in MOA2. The remaining half are the result of different types of permitting errors. Until the 2010s, project and well permitting decisions were mostly delegated to DOGGR's six district offices. DOGGR headquarters in Sacramento generally did not review district permitting decisions; nor did it provide standardized guidance on identifying the injectable zone for exempt aquifers. Limited oversight from DOGGR headquarters may have contributed to several types of permitting errors, including:

- Border Confusion: Permits were granted for injection wells that fell just *outside* the productive limits of a hydrocarbon-producing field but *inside* the slightly larger administrative boundaries for that field.[4] Many DOGGR staff believed the administrative limits to define an exempt aquifer. However, the state's UIC Primacy Application to U.S. EPA had proposed to exempt certain hydrocarbon-producing aquifers based on their 1973 and 1974 productive limits, and not their administrative limits.
- Expanding Productive Limits: With advances in oil extraction technology, the effective productive limits for many fields have expanded since they were drawn in the 1970s. Staff may have believed that injection was permitted in the actual, present productive limits of a field, rather than looking to the boundaries established in the Primacy Application.
- Depth Confusion: Some injection wells were within the areal boundaries of an exempt aquifer, but were nonetheless injecting above or below the exempt aquifer, into a non-exempt zone. It appears, in certain cases, staff based their permitting decisions only on the contour maps included in the Primacy Application without also looking to the depth

[4] "Productive limits" means the outermost areas of a field where hydrocarbons could be extracted. They differ from administrative field limits, which are the administrative boundaries created using the Public Land Survey System. In practice, productive limits have expanded over time with improvements in oil production technology.

interval for the exempted aquifer, which was produced in a table elsewhere in the Primacy Application.

- Partial Exemption: In certain cases, only portions of an aquifer were exempted and not the whole aquifer. Staff granting permits based solely off of a list of which field and zone had been exempted, without referring back to the Primacy Application, may have mistakenly believed the whole aquifer was exempt.

Recent Discovery and Actions

DOGGR staff first became aware of a potential systemic problem with the aquifer exemption process in 2011, when a headquarters staffer temporarily working in a district office noticed a discrepancy between lists of exempted aquifers. In late 2011, DOGGR staff further discovered that there were two different versions of the Memorandum in DOGGR files: MOA1 classifying the 11 aquifers as not exempt and MOA2 classifying them as exempt. DOGGR notified U.S. EPA in early 2012. DOGGR and U.S. EPA agreed that DOGGR would identify all the wells injecting into non-exempt zones and ask oil operators in those zones to start the process of applying for an aquifer exemption.

In 2014 the Central Valley Regional Water Board independently discovered that injection had been permitted in sub-3,000 mg/l TDS aquifers. It notified DOGGR that there may be groundwater supply wells at risk. Until that time, DOGGR had not treated the injection wells, which are located in oil fields, as a significant public health risk, although questions about this had been raised within DOGGR. The Governor's office assembled an inter-agency team to assess and address any public health risk.

The State, in coordination with U.S. EPA, responded by initiating a process to review most of the state's injection wells, prioritizing wells that were injecting into non-exempt, non-hydrocarbon-bearing aquifers, as well as the 11 aquifers which had historically been treated as exempt. Thus far, the State Water Board has evaluated just over 200 injection wells of highest concern for potential risk to water supplies. In 2014, 11 injection wells were ordered shut-in, along with orders requiring oil producers to provide testing of injection well injectate and nearby groundwater supply wells. In March, 2015, DOGGR confirmed or requested the closure of 12 additional wells. Injection permits for 11 wells were voluntarily relinquished at DOGGR's request. A 12th well was ordered shut in by DOGGR.

Additionally, DOGGR headquarters is now doing a second review of all new or expanded project permit applications prior to approval by the districts. This will provide another opportunity to correct any permitting errors and will promote greater permitting consistency across the six DOGGR districts.

Going forward, in conjunction with U.S. EPA, DOGGR and the State Water Board have proposed an enforceable compliance schedule to eliminate injection into non-exempt aquifers, as outlined in a February 6, 2015 letter to U.S. EPA. Specifically, for non-exempt aquifers between 3,000 to 10,000 mg/l TDS, all injections must cease by February 15, 2017, unless an aquifer exemption is applied for by the state and approved by U.S. EPA. For non-exempt aquifers with less than 3,000 mg/l TDS, the deadline to stop injecting is October 15, or immediately where the injection is potentially impacting water supplies. For the 11 aquifers historically treated as exempt, DOGGR and the State Water Board will work with U.S. EPA on a case-by-case basis to determine by February 15, 2017, whether these aquifers qualify for exemption. During the review process, DOGGR will continue to issue emergency orders to stop any injection that potentially impacts water supply wells.

EXHIBIT C

DEPARTMENT OF CONSERVATION
DIVISION OF OIL, GAS, & GEOTHERMAL RESOURCES

February 6, 2015

Ms. Jane Diamond
Director, Water Division
Region IX
United States Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105-3901

Re: Class II Oil and Gas Underground Injection Control

Dear Ms. Diamond:

Thank you for your letter of December 22, 2014, regarding the several meetings and dialogue we have been engaging in for the past several months, and your request for a more detailed plan of action to address issues with California's Class II Oil and Gas Underground Injection Control program.

Our agencies share a common goal with the United States Environmental Protection Agency (US EPA): to ensure public health and safety and the protection of groundwater resources for California residents who live and work near oil producing areas of California. The Division of Oil, Gas, and Geothermal Resources (Division) is responsible for ensuring that operators of oil and gas injection wells adhere to environmental rules and permit requirements that protect groundwater and other resources. The State Water Resources Control Board (State Water Board) assists the Division with the protection of water resources. Consistent with our mutual roles related to ongoing injection activities, the Division and the State Water Board are working closely together for more integrated oversight of the underground injection control program.

Following a discussion of the relevant background, we lay out the intended approach jointly developed by the Division and the State Water Board to address what has been the primary focus of our discussions since last summer: details about the review and, where necessary, redirection of underground injection operations in this State. We then address your request for detail on our intended plan to meet the critique expressed in the 2011 report of the Horsley Witten Group (Horsley Witten). Finally, we conclude with a discussion of plans to communicate these developments to the public.

BACKGROUND

Oil and gas production in California is a $34 billion annual industry, employing more than 25,000 people with an annual payroll of over $1.5 billion. California is the third largest oil-producing state in the nation, producing about 575,000 barrels per day. Property and other tax payments to the State and local governments from the industry amount to about $800 million annually. There are approximately 90,000 active or idle production and injection wells in the State.

Injection wells have been an integral part of California's oil and gas operations for more than 50 years. Currently, over 50,000 oilfield injection wells are operating in the State. Injection wells are used to increase oil recovery and to safely dispose of fluid produced with oil and natural gas. About 75 percent of California's oil production is the result of Enhanced Oil Recovery (EOR) methods such as steam flood, cyclic steam, water flood, and natural gas injection. Of these injection wells subject to UIC regulations, approximately 1,500 are fluid disposal wells, which are necessary to re-inject water produced with oil and gas and other fluids that cannot be disposed of through any other method, such as treatment, beneficial use, or recycling for other industrial applications. Most of the oil and gas fields in the State are quite mature. Many are in the waning stages of their productive cycle and require EOR techniques for continued development. The use of injection wells has been increasing in recent years. The increased use of injection potentially creates additional health and safety risks.

The protection of California's aquifers from contamination is a matter of the highest priority for the Division and the State Water Board, and of special importance given the state of emergency resulting from our unprecedented drought. Therefore, this effort to modernize the regulation of the State's injection wells must be both urgent and thorough. As explained more fully below, the Division has begun systematically reviewing these wells and applicable regulations as part of its mandate to protect public health and safety.

2011 Audit and Horsley Witten Report

In 2010, the Division worked with US EPA to conduct an audit to review the Division's practices and regulations, and ensure the Division's compliance with its obligations to properly administer its Class II injection program as a primacy state under the US Safe Drinking Water Act (SDWA) and applicable California law. The audit, conducted by the Horsley Witten Group, was completed in the summer of 2011. Horsley Witten highlighted several areas of concern, and the US EPA requested a plan to address the gaps identified. The Division responded in November 2012 (Enclosure A) by committing to adopt regulations and provide additional resources to close the gaps identified in the audit and create a stronger, more robust regulatory program.

In 2013, the Department took important steps toward meeting this commitment, including:

- Added 36 staff positions and enhanced staff training on UIC Program mandates and requirements
- Added resources to address orphan well plugging and abandonment
- Worked with the Legislature to help it enact revisions for the financial requirements for bonding
- Established a Division monitoring and compliance unit to conduct internal assessment of the UIC Program

Injection Project Review and Aquifer Exemptions

The Division acknowledges that in the past it has approved UIC projects in zones with aquifers lacking exemptions. The Division has not kept up with the task of applying for the necessary aquifer exemptions in hydrocarbon-bearing zones required by statute, even though many of these zones possess attributes that would qualify them for exemption. The Division has thus been slow to reconcile the reality that industry has expanded the productive limits of oil fields established in the 1982 primacy agreement with SDWA requirements to obtain aquifer exemptions.

Complicating matters, 11 aquifers with historical injection activities before 1982 were described in State documents in the early 1980s as proposed for exemption, and were endorsed as exempt in subsequent federal documents.[1] This led to the issuance of a number of injection permits in those 11 aquifers. However, the geologic basis for such exemptions is now in question. Therefore, in addition to the zones of aquifers that are lacking exemptions, these 11 aquifers that have historically been treated as exempt will also be evaluated to determine their appropriate exemption status.

Injection Project Review Process

The Division acknowledges injection project review continues, and a process has been developed to determine the wells with the highest risks associated with injection, and the steps to be taken to bring injection well permits into compliance with the primacy agreement with US EPA. This review examines the following groups of wells, in this order:

[1] Among these documents are (1) a December 13, 1982, Region IX memo forwarding to US EPA headquarters a version of the Memorandum of Agreement containing no significant exemption denials, described by Region IX as resolving "all known issues" with California's primacy application, and (2) a May 17, 1985, letter from Frank Covington, US EPA's then-Director of the Water Management Division for Region IX that appears to confirm that US EPA did not deny any of the exemptions proposed by the Division in its primacy application.

Category 1 Wells: Class II water disposal wells injecting into non-exempt, non-hydrocarbon-bearing aquifers or the 11 aquifers historically treated as exempt

Category 2 Wells: Class II enhanced oil recovery (EOR) wells injecting into non-exempt, hydrocarbon-bearing aquifers

Category 3 Wells: Class II water disposal and EOR wells that are inside the surface boundaries of exempted aquifers, but that may nevertheless be injecting into a zone not exempted in the primacy agreement

This review covers over 30,000 wells, more than 29,000 of which are cyclic steam wells in hydrocarbon zones. Review of wells in Category 1 is nearing completion. Review of wells in Categories 2 and 3 is expected to be complete in early 2016 as annual project reviews are completed in compliance with regulation. When completed, this review will serve to clarify records and improve data quality so that the full review of the UIC program can be completed.

An initial list of wells injecting into non-exempt USDW aquifers was previously provided to US EPA. That list includes Category I and II wells. While updating, reviewing, and validating that list is ongoing, attached (Enclosure B) is a summary of the information. Of the 2,553 wells on the list, approximately 140 of the active wells have been tabbed for immediate review by the State Water Board because the aquifers are reported to be lacking hydrocarbons and contain water with less than 3,000 mg/l total dissolved solids (TDS). The State Water Board is currently reviewing those wells to screen for proximity to water supply wells or any other indication of risk of impact to drinking water and other beneficial uses.

The Division review and updating of all injection well records in this list will be completed by May 15, 2015. The State Water Board expects to be able to review each injection well at a rate of approximately 150 wells per month.

Aquifer Exemptions Process

Together, the Division and the State Water Board have identified a process for aquifer status evaluation and potential aquifer exemptions. Although injection is occurring into aquifers that have not been exempted and the 11 aquifers historically treated as exempt, the potential risks associated with such injection differ from zone to zone. Last summer, as you know, some injection wells that potentially presented health or environmental risks were ordered to cease injection, and the operators ordered to provide specific data so that the regulatory agencies could fully evaluate whether these

wells could potentially have had any measurable impact on nearby water supply wells. To date, the analytical data from the water supply wells that the State ordered to be tested have not shown any contamination of the water supply wells by oil and gas injection activities.

As injection activities in non-exempt aquifers and the 11 aquifers historically treated as exempt are delineated and described, the Division will require relevant oil and gas operators to obtain and prepare the necessary supporting documentation to justify aquifer exemptions. If these data support an aquifer exemption proposal, the Division will prepare and submit draft proposals for aquifer exemptions to the State Water Board for their concurrence. Once both agencies are satisfied with the proposed exemption and justification, the Division will submit the aquifer exemption applications to the US EPA for approval. A more detailed statement of the Division's and State Water Board's process for development of aquifer exemption applications is described in Enclosure C.

Going forward, the Division will take the following steps in this general order:

1. Work with US EPA to clearly articulate to the public the requirements for aquifer exemptions. This will be undertaken via two US EPA-sponsored workshops, one in Bakersfield the last week of February 2015 and the second in Los Angeles the last week of March 2015. The purpose of these workshops is to inform interested stakeholders, of the kind of data and data analysis essential to the development of a robust application by the State for an exemption of a portion of an aquifer from the SDWA by the US EPA.

2. Delineate a clear process for operators to supply the required supporting data to support and justify an aquifer exemption application. The Division will prepare its own guidance document to facilitate receiving appropriate information and data from operators to prepare justifiable aquifer exemption applications. A guidance document should be available by April 1, 2015.

Although this timeline suggests that the Division may not be able to move forward with aquifer exemptions until after April 1, 2015, this is not necessarily the case. The Division has already been evaluating the data supplied by operators for the preparation of a number of aquifer exemption requests by the State. Moreover, to enhance efficiency and reduce duplication of efforts, the Division is instructing oil and gas operators to develop a process by which several adjacent operators can combine data so that portions of aquifers relevant to the operations of different operators can be considered as a whole.

The Division will provide the data and an analysis of the data to the State Water Board for consultation prior to submitting them to US EPA. The Division will submit the exemption request to US EPA if the portion of the aquifer meets the criteria for exemption and the State Water Board determines that injection into the aquifer will not adversely affect existing or potential beneficial uses of groundwater.

Wind-Down of Existing Injection and Permitting of New Injection

The Division proposes to use a combination of administrative mechanisms to ensure that existing and new injection into non-exempt aquifers and the 11 aquifers historically treated as exempt is either phased out or covered by an aquifer exemption, and that any threats to drinking water or other beneficial uses of water are urgently addressed.

To summarize, the Division will use rulemaking to codify a wind-down schedule that provides transparency to the regulated community and the public at large. The schedule will provide for the phased elimination of new and existing injection into aquifers that have not been approved as exempt by the US EPA by February 15, 2017. New injection will be allowed only if strict criteria are met, and, like existing injection, will have to cease if no new exemption has been timely obtained. At the same time, the Division, in consultation with the State Water Board, will issue administrative orders to address specific circumstances where injection poses a threat to drinking water or other beneficial uses of water. Major highlights of the approach to address existing injection and new injection into these aquifers are presented below. A more detailed and complete description of the approach is contained in Enclosure D.

Rulemaking

By April 1, 2015, the Division will initiate rulemaking to establish a regulatory-compliance schedule to eliminate Class II injection into undisputedly non-exempt aquifers statewide. The proposed regulations will require the following:

1. The first principle of the regulations will be that all Class II injection into non-exempt aquifers with less than 10,000 TDS must, in all cases, cease by February 15, 2017, unless and until an aquifer exemption has been duly approved by US EPA. Injection may be ordered to cease earlier if a well is determined to potentially impact water supply wells,[2] as discussed further, below. ("Administrative Orders.")

[2] Injection wells potentially impacting water supply wells include injection wells into aquifers with 3,000 TDS or less that meet either of the following criteria: (1) the uppermost depth of the injection zone is less than 1,500 feet below ground surface (regardless of whether any existing supply wells are in the vicinity of the injection well), or (2) the injection depth is within 500 feet vertically and 1 mile horizontally of the screened portion of any existing water supply well.

2. Where a non-exempt aquifer contains 3,000 TDS or less and is non-hydrocarbon producing, injection must cease by October 15, 2015, unless and until an aquifer exemption has been approved by US EPA.

3. Where a non-exempt aquifer is hydrocarbon producing, new wells that are part of a previously approved project may be permitted if groundwater in the vicinity of the hydrocarbon-bearing zone does not currently have any beneficial use.[3] Such approvals will include the express condition that the permit expires on February 15, 2017, unless US EPA approves an aquifer exemption before then.

4. With respect to the 11 aquifers historically treated as exempt, the State Water Board and the Division will work with US EPA to evaluate these 11 aquifers. If any portion of these aquifers meets the criteria for exemption and the State Water Board determines that injection into the aquifer will not adversely affect existing or potential beneficial uses of groundwater, the Division will prepare and submit an exemption evaluation to US EPA. The evaluation and subsequent decision for these 11 aquifers will be completed by February 15, 2017. Either by the planned regulation or by other appropriate means, the Division may allow for limited new injection into these 11 aquifers in the unusual case where the proposed injection well is part of an approved project and an initial screening of the target zone shows that the zone contains hydrocarbons, has very high levels of naturally-occurring constituents (e.g., arsenic or boron), or there are other factors that make any affected groundwater unsuitable for beneficial use. Finally, the regulation would provide that any approval is subject to evaluation of the appropriate exemption status of the aquifer.

Administrative Orders

During the process of codifying the compliance schedule to phase out injection into non-exempt aquifers, the Division will issue administrative orders to halt any injection that potentially impacts water supply wells. The Division and the State Water Board are presently evaluating all injection into non-exempt USDWs and the 11 aquifers historically treated as exempt to identify potential for such impacts. The evaluation includes screening for water wells in the area of the injection well and collection and review of data regarding the water quality and depth of the aquifer where injection is occurring. Where the evaluation indicates that an injection well potentially impacts

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[3] Note that this does NOT include any use of produced water.

water supply wells, the Division will issue an emergency order to the operator to cease injecting immediately.

Issues Identified in the Horsley Witten Report

The Class II UIC Program is complex, consisting of several components that have distinct attributes and therefore require focused sets of regulations, compliance approaches, and review requirements. Given the rapid evolution of technologies and industry practices to extract more oil and gas from the State's mature fields, regulations developed even a decade ago may not fully address all of the issues created by what is now routine industry practice.

Horsley Witten included several recommendations pertaining to the practices, processes and policies of the Division used to implement the State's oil and gas regulations (Enclosure C). Report recommendations address a wide range of the Division's practices, activities and regulations, either directly or indirectly, in these areas:

- The definition and protection of underground sources of drinking water (USDW) area of review (AOR) and zone of endangering influence (ZEI)
- Well construction and cementing requirements
- Plugging and abandoning requirements
- Requirements for fluid disposal
- Requirements for monitoring of zone pressure
- Annual project reviews
- Well monitoring requirements
- Idle-well planning and testing program
- Financial responsibility requirements
- Cyclic steam injection wells
- Production from diatomite

Regulation Development

Many aspects of the recommendations of the Horsley Witten report can be implemented through existing Division regulations. However, others will require new regulation. Moreover, though cyclic steam injection wells and techniques employed for oil production in diatomite formations were not specifically addressed in the Horsley Witten report, they are extensively used in California, and existing regulations in these areas can be improved.

The Division has not had significant changes to its UIC regulations since the original primacy application. Regulatory amendments will be pursued through a rulemaking process to address these needs. The Division's goal is to ensure its regulations:

- Protect public health, the environment, and resources
- Address the UIC program mandates
- Address industry practices now and into the foreseeable future
- Are developed with the public participation contemplated by statute
- Set predictable standards for the regulated community
- Are implemented and enforced properly

These regulations will be quite extensive and will take some time to develop. The Division anticipates scheduling workshops, public meetings and other outreach to discuss regulations to cover a range of topics. The workshops should include at least the following: US EPA, State Water Board, Regional Water Quality Control Boards, Department of Toxic Substances Control, Air Resources Board, oil and gas operators, county and city agencies, non-government organizations, and the general public.

Potential Areas for New and Modified Regulations

We envision that a thorough review of the UIC program, the necessary attendant revision of existing regulations, and the development of needed new regulatory measures will require a period of approximately three years. The areas in which the Division is contemplating new or modified regulations include:

- Well construction and cementing requirements
- Plugging and abandoning requirements
- Evaluation of the zone of endangering influence (ZEI)
- Requirements for fluid disposal
- Requirements for monitoring of zone pressure
- Annual project reviews
- Well monitoring requirements
- Inspections and compliance/enforcement practices and tools
- Idle-well planning and testing program
- Cyclic steam injection wells
- Production from diatomite

Exclusive of proposed program revisions and aquifer exemption, the following milestones need to be met:

- Review of each and all current UIC projects for completeness of records and development of a list of deficiencies.
- Meetings with operators to review records and project deficiencies, and develop a compliance schedule (exclusive of aquifer exemptions).
- Initiate and complete rulemaking as a comprehensive package.

The Division will prepare a more detailed work plan for UIC rulemaking by April 15, 2015.

Searchable Database for Class II Wells

Activities to review UIC projects, check and revise data on all injection wells, and the development of aquifer exemption applications will all drive improvement in the Division's data that in turn will drive the need for vastly improved data management systems.

The Division's data management systems need significant upgrades. In response to the demands created by the requirements of the well stimulation program as a result of Senate Bill 4, the Division has hired additional GIS staff whose combined capabilities will be sufficient to manage all of the Division's needs. However, other aspects of the data management problem will be more difficult to resolve and will be conducted continuously in the background as project reviews, well reviews, and aquifer exemption information are compiled in a GIS environment.

You asked for a forecast of when the Division might be able to have a fully searchable database of injection wells available. Unfortunately, we cannot respond with specificity to this request due to inadequacies in the data management environment itself, and current lack of financial resources needed to create an adequate environment. The Division is, however, strongly committed to this effort and will follow up with US EPA when we can provide a more definitive answer.

The Division has created a team to develop a Feasibility Study Report (FSR) that will consider the Division's current and future requirements for data management and the kind of data environment that is needed for the Division to serve all stakeholders far more efficiently and effectively in the future. The FSR is a fundamental first step in the State's IT-procurement process and will be completed in December 2015. An approved

FSR will lead to a budget change proposal to seek the funds needed for system development.

Communication Plans

The closure of injection wells in Kern County during the summer of 2014, has required focused attention to communication with key stakeholder groups. These include industry, environmental organizations, elected officials – especially the state and federal elected representatives – the press, and via the press, the public.

The Division and the State Water Board have responded to a large number of stakeholder and public inquiries, and, to enhance public awareness, have developed frequently asked questions, statements, and presentations delivered at numerous public fora.

In short, much preparatory work has been accomplished. However we will continue to build on this communications foundation with additional attention to meet growing inquiries. We take seriously our responsibility to address growing public concern and press inquiries in a timely and informative manner.

Communication and outreach can be amplified by providing regularly updated information on the UIC program, background documents and reports, frequently asked questions, and work status on priority items noted above, specifically aquifer exemption applications, all clearly linked on the Division's web page. This page will serve as a clearinghouse for information on program activities, items of interest to stakeholders, and meeting and other notifications.

The Division and the State Water Board will continue to meet regularly with industry, environmental and other non-governmental organizations, elected officials, as well as US EPA.

CONCLUSION

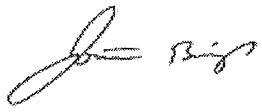
The severe drought emergency, new regulations for well stimulation with ground water monitoring and other requirements, as well as long overdue revisions to the UIC program, have fundamentally changed how the Division and the State Water Board work together to protect public health and ensure the security of the State's

groundwater resources. We are committed to making this relationship effective so that the State can achieve full compliance with the SWDA, and we are committed to revising the UIC program efficiently, and with public safety as a first priority. We look forward to continuing our active dialog with you and to advancing our Federal-State partnership.

Sincerely,

Steve Bohlen
State Oil and Gas Supervisor

Sincerely,



Jonathan Bishop
Chief Deputy Director

Attachments

cc: Cliff Rechtschaffen, Governor's Office
John Laird, Natural Resources Agency
Matthew Rodriquez, CalEPA

Enclosure A: Division's November 16, 2012 Response to Report of Horsley Witten Group

NATURAL RESOURCES AGENCY EDMUND G. BROWN JR., GOVERNOR

DEPARTMENT OF CONSERVATION

Managing California's Working Lands

DIVISION OF OIL, GAS, & GEOTHERMAL RESOURCES

801 K STREET • MS 20-20 • SACRAMENTO, CALIFORNIA 95814

PHONE 916 / 445-9686 • FAX 916 / 323-0424 • TDD 916 / 324-2555 • WEB SITE conservation.ca.gov

November 16, 2012

David Albright, Manager
Ground Water Office
United States Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105-3901

Dear Mr. Albright:

The Division of Oil, Gas, and Geothermal Resources (Division) has reviewed the California Class II UIC Program Review report, prepared by Horsley Witten Group, Inc. (the Horsley Report), and has developed a plan to address the concerns and recommendations referenced in the report. As we have previously discussed, the Division began to evaluate its Underground Injection Control (UIC) program in 2009 with the hopes of bringing the program into conformance with state laws and regulations. Although we have improved our UIC program, and continue to evaluate it, the Division is aware that more work is required.

In your letter dated July 18, 2011, US EPA requested an action plan that includes clarification, improved procedures, and consistent standardized implementation in several areas, including:

- UIC staff qualifications;
- annual project reviews;
- mechanical integrity surveys and testing;
- inspections and compliance/enforcement practices and tools;
- idle well planning and testing program;
- financial responsibility requirements; and
- plugging and abandonment requirements.

Attached, please find the Division's plan to address the concerns of the US EPA and to identify those areas where the Division can improve its UIC program to more fully advance the objectives of the Safe Drinking Water Act. The Division views this action plan as a living document, which can be updated to incorporate any additional needed changes.

The Division looks forward to continuing our long-standing partnership with US EPA in protecting California's water resources. This plan will provide guidance as we update our UIC Program. We welcome your feedback and discussions regarding the elements in this action plan.

Sincerely,

Tim Kustic
State Oil and Gas Supervisor

cc: Mark Nechodom, Director, Department of Conservation
Rob Habel, Chief Deputy
Dan Wermiel, Technical Program Manager
Jerry Salera, UIC Program Manager

Department of Conservation
Division of Oil, Gas, and Geothermal Resources

Underground Injection Control Action Plan

RESPONSE TO THE US EPA JUNE 2011 REVIEW OF CALIFORNIA'S UIC PROGRAM

Background and Introduction

The EPA approved the Division of Oil, Gas, and Geothermal Resources' (Division, or DOGGR) application for primacy in the regulation of Class II injection wells under section 1425 of the Safe Drinking Water Act in March 1983. This approval gave the Division primary responsibility and authority over all Class II injection wells in the State of California. The EPA remains a Division regulatory partner with Division oversight authority and separate enforcement authority for Class II well operators. Class II wells inject fluids associated with oil and natural gas production.

The Division is fully committed to implementing a strong Underground Injection Control (UIC) program and will continue to pursue additional resources to address program growth and/or UIC well count increases.

This Action Plan is in response to a review of California's UIC program, requested by EPA's Region Nine Ground Water Office, and performed by the Horsley Witten Group. The Horsley Report, March 2011 (Report) was submitted to EPA in June 2011, and forwarded to the Division on July 18, 2011.

The Report included several recommendations pertaining to the practices, processes and policies of the Division used to implement the State's oil and gas regulations. To address a number of Report recommendations and other needed UIC regulatory updates, the Division will begin a rulemaking in 2013 to update the UIC program, well construction, and plugging and abandonment regulations. Additionally, the Division will determine whether statutory changes are needed and work with the California Legislature as necessary.

It is important to note the Division has added 43 staff positions during the past three years; these staff are working in UIC program or other closely related programs. Additionally, the Division implemented an internal review processes such as audits and mandatory Headquarters technical reviews to ensure greater compliance with UIC mandates.

The Division has followed the Report's format in this Action Plan and responded to each recommendation as presented in the Report. Each recommendation is presented in summary form below in bulleted paragraphs using italicized text.

USDW DEFINITION AND PROTECTION

- *The DOGGR Class II UIC Program should address the lack of clarity regarding USDW protection and ensure that all USDWs are fully protected from fluid movement and resulting degradation. USDWs containing more than 3,000 mg/l TDS should be protected as much as fresh water aquifers are protected in the permitting, construction, operation, and abandonment of injection wells.*

The Division's UIC program protects underground sources of drinking water (USDW) and requires that all injection is confined to the approved zone of injection. When the injection fluid is confined to the intended zone, all other zones and waters are protected.

Sections 3220 and 3228 of the California Public Resources Code (PRC) require zonal isolation. These standards have been followed for setting casing in, and plugging and abandonment of, all wells, including injection wells. Since these statutes predate the Safe Drinking Water Act, the USDW term is not found in state law.

During the rulemaking process to begin in 2013, the Division will pursue, as necessary, additional plugging and cementing requirements to increase USDW protection.

AREA OF REVIEW / ZONE OF ENDANGERING INFLUENCE

These recommendations address area of review/zone of endangering influence (AOR/ZEI) determinations, well construction practices and the status of wells located within the AOR, and corrective action requirements.

AOR/ZEI Determinations

- *The ZEI should be calculated, especially for disposal wells, with an accurate representation or reasonable estimate of all the relevant parameters that determine the ZEI, including the static pressures of the injection zone and USDWs in the project area.*
- *Disposal into non-hydrocarbon zones and normally* [sic] *pressure hydrocarbon bearing zones should be carefully monitored for reservoir pressure increases beyond normal hydrostatic pressures that could cause the ZEI to increase beyond the AOR over time.*
- *A fall-off pressure test should be run to determine the static reservoir pressure in wells in which shut-in pressures do not fall to zero after an*

extended shut-in period. If not done, the permit to inject should be rescinded.

- *The ZEI calculations should be reviewed if fall-off test results indicate higher than normal hydrostatic pressure in the injection zone. If the original AOR is smaller than the ZEI, the AOR should be expanded, or the permit to inject should be rescinded.*

Well Construction Practices and Status of Wells Located within the AOR

- *When casing repairs occur or when wells are plugged and abandoned, cement placement should be required at the base of USDWs in injection wells and AOR wells.*
- *Unless USDWs are known to be absent in the area, new injection wells should be required to have long string casing cemented to the surface.*

As outlined in our Primacy Application (ftp://ftp.consrv.ca.gov/pub/oil/publications/safe_water.pdf), the Division utilizes the one-quarter (1/4) mile fixed radius; if appropriate data is available, a radial flow equation may also be used to determine the ZEI. Although the Division has typically utilized the one-quarter mile fixed radius, we are now using other methods, such as Bernard's equation, the modified Theis equation, and equations included in the EPA's publication *Radius of Pressure Influence of Injection* (EPA-066/2-79-170) to determine the ZEI. The Division is pursuing new requirements for waste fluid disposal wells, and will consider including a more in-depth evaluation of the ZEI.

The Division is concerned with any injection well where injection zone pressure exceeds hydrostatic pressure. This may indicate an over-pressurized injection zone and a greater threat of non-confinement. In these cases, the Division looks at the ZEI and evaluates all wellbores within the ZEI to ensure fluid confinement to the intended zone of injection. In addition to the AOR, the Division requires mechanical integrity testing of all injection wells on a periodic basis. If a well lacks mechanical integrity, the Division requires the operator to immediately cease injection and to repair the well.

As for well construction requirements, the Division's long-standing requirements set by regulation dictate isolation of all oil and gas zones and any underground or surface water suitable for irrigation or domestic purposes. This is accomplished by requiring the cementing of casing and the placement of cement plugs. In addition, when wells are plugged and abandoned, the Division requires the use of heavy drilling mud in those portions of the hole that do not have cement. All these requirements will be evaluated for adequacy and updated as necessary in the rulemaking to

begin in 2013 to ensure UIC program requirements are adequate for USDW protection.

DIVISION ANNUAL PROJECT REVIEW

- *This recommendation addresses records of well activity, pressures, inactive well and noncompliance data associated with injection well projects. Comprehensive project reviews should be conducted annually for all active injection well projects, including meetings with the operators for the most critical projects.*

The Division is fully committed to comprehensive project reviews. There are now two processes in place to address this concern -- a project audit, and an annual project review.

The Division has acquired additional staff who will audit injection projects to ensure that the projects are:

- permitted in accordance with state mandates;
- continued in compliance with mandates and approvals; and
- monitored and tested to ensure that fluid is injected into the intended zone.

This practice is authorized by the broad protection mandates of PRC section 3106 (a).

Additionally, the Division has increased UIC staff to ensure an annual project review for all injection projects. This amounts to a review of District office project data, and when necessary, a corresponding request that operators submit any missing data. Division staff will also meet with operators to discuss injection project operations to ensure that projects are operating in accordance with their project applications and approvals.

MONITORING PROGRAM

These monitoring program recommendations address mechanical integrity tests (MIT) and maximum allowable surface pressure (MASP).

Mechanical Integrity Tests

- *SAPT pressures equal to the maximum allowable surface injection pressure should be required if it will not cause damage to the casing. The newer wells should be able to withstand the MASP.*
- *If tested at less than the MASP, more frequent SAPTs and monitoring/reporting for anomalous pressure on the annulus should be required.*
- *Static temperature logs should be required more often in slimhole/tubingless completions where USDWs are present and especially for USDWs that are protected by only one casing string and/or lack cement at the base of USDWs.*

- *Cement bond logs should be required in new and newly converted injection wells unless USDWs are known to be absent in the area.*
- *Static temperature logs should be required if an existing well lacks sufficient cement at the base of USDWs, and/or squeeze cementing should be considered at the USDW base to ensure isolation from fluid movement.*

Maximum Allowable Surface Injection Pressures

- *Injection pressure should be maintained below fracture pressure in all new and existing projects, as determined by approved SRTs.*
- *SRTs should be required in new wells to determine the fracture pressure of the injection zone unless the formation fracture gradient is known with acceptable confidence based on SRTs in nearby wells.*
- *A pressure gauge should be required to measure bottom-hole pressures in SRTs directly rather than relying on calculation of friction losses from surface pressure measurements and injection rates.*

The Division now mandates that the Standard Annular Pressure Test (SAPT) be performed either to the approved injection pressure or 200 psi, whichever is higher. The Division does not allow variance from this policy unless there is the potential to damage well casing.

Since continuous monitoring of the annular space has advantages over the once-every-5-years SAPT, the Division now allows a positive-pressure annulus monitoring system with regular reporting with a lower-pressure, 5-year SAPT. These two testing options verify annular integrity while providing flexibility to operators.

The Division agrees that if wells are completed by way of slimhole/tubingless completions, static temperature logs should be required more often than for traditional completions. Division staff is moving forward to develop a policy to address this issue; if additional regulations are necessary, the Division will include this item in the rulemaking to begin in 2013.

The Division's regulations require that injection pressure be maintained below the fracture pressure as determined by a Step Rate Test (SRT). The Division has implemented a new SRT policy, based largely on EPA's procedures, which require downhole pressure monitoring. These improvements, along with additional field inspection staff and upgrades to electronic data management systems, increase the Division's oversight of injection operations, particularly the injection pressure.

INSPECTIONS AND COMPLIANCE / ENFORCEMENT PRACTICES AND TOOLS

- *A high priority should be placed for inspection of wells in or near residential areas and where USDWs are present.*
- *Cement placement operations should be witnessed to ensure the correct volumes and quality of cement are pumped into a well.*
- *Witnessing RATs in enhanced recovery wells should be given a higher priority, especially where USDWs may be present. At least 25 percent of RATs and all SAPTs in wells where USDWs are present should be witnessed.*
- *Whenever possible, districts should avoid giving advance notice of routine inspections to operators.*
- *Copies of an inspection report should be provided to the operator whether or not deficiencies are found during inspections.*
- *The installation of a pressure gauge on the tubing and the casing/tubing annulus should be required as a permanent fixture on all injection wells.*
- *Wells that fail MITs should be repaired or plugged and abandoned within a set time period, preferably within six months or sooner depending on the nature of the leak and potential threat to USDWs.*

The Division has successfully pursued additional UIC field staffing resources to increase UIC oversight in all areas. Although the Division regulations do not distinguish between rural and urban injection wells, the Division does allocate additional resources to oil fields in highly urbanized areas.

The Division's additional UIC resources have increased its oversight of wells in direct relation to their priority. The Division places a higher priority on inspecting water disposal wells which can pose a greater risk of contaminating USDW and fresh water.

The Division requires the witnessing of cement plugging operations. The witnessing of the plugging operations continues to be one of the highest priorities for Division field staff. In the office, detailed reviews of well work histories by Division engineers determine whether plugging operations comply with State mandates. If not, remedial work is ordered. Additional staffing, along with increased training, is ensuring the Division is properly evaluating cementing operations.

The Division has a goal to witness at least 25% of the Mechanical Integrity Tests (MIT), with a higher emphasis on disposal wells. Once new UIC personnel are fully trained the Division intends to increase this percentage.

The Division has been evaluating the performance of cyclic steam wells, which should be tested at least once a year, or immediately if evidence of casing damage or failure is found. This testing requirement is supported by data showing that cyclic steam wells undergo more stress than other types of injection wells. The Division will address additional cyclic steam well testing in the rulemaking to begin in 2013.

When staff witness detailed tests, a report is provided to the operator. In addition to witnessing tests, the Division performs thousands of inspections a year without prior notice to the operators. Because of the volume of inspections, the Division only documents that an inspection was performed and what deficiencies were found. The list of deficiencies is included in a letter to the operator, which details what must be done and the timeframe to bring the operation into compliance.

The permanent installation of pressure gauges on UIC wells is not a current requirement. With technological advancements, capturing pressure data is non-burdensome to operators. In 2013 when the Division moves forward with updating its UIC regulations, pressure monitoring via a gauge or equivalent equipment will be pursued.

If the MIT should indicate a mechanical integrity issue, the well is required to be shut-in immediately. The Division does not allow injection until the well is repaired. If the well should become idle (i.e. no injection for six continuous months over a five-year period) the well previously fell under the Division's idle well program (IWP) only. The IWP, which includes fluid level and casing integrity testing, is designed to eliminate the potential threat caused by idle wells. In addition to IWP, the Division has changed processes to ensure idle injection wells remain within the UIC program to ensure UIC program testing is conducted. Since current regulations lack clarity on when a well is to be repaired or plugged and abandoned, the Division will pursue such clarity in the rulemaking to begin in 2013.

IDLE WELL PLANNING AND TESTING PROGRAM

- *The idle well management and testing guidelines at Section 138 in the MOI should be modified to clarify which provisions apply statewide and which apply only to District 4.*
- *Idle well fees and bond/escrow amounts should be reviewed and increased amounts to levels that would encourage operators to reactivate or plug idle wells.*
- *The testing program should be modified to base the fluid level survey pass/fail results on the rise of fluid to the base of USDWs rather than the BFW.*
- *SAPTs should be required in wells after two years of inactivity and every two years after that where USDWs are present..*

- *Regardless of the fluid level survey results, an SAPT should be required if USDWs are present in wells with tubing and packers installed.*
- *Bridge plugs or cement plugs above the injection and below the base of USDWs should be required where USDWs are present in wells lacking tubing and packers. In addition, wells should be required to successfully pass an SAPT to remain in idle status.*
- *Idle wells that fail the SAPT should be repaired or plugged and abandoned within six months in areas where USDWs are present or within 60 days if USDWs are at risk of potential fluid movement.*

The Division will revisit the Idle IWP through the legislative process with the intent to update the law to address the excessive number of idle wells. The solution will address the potential financial liability to the State, the obligations of owners, and intends to address all of the recommendations listed in the above. Although program implementation in the 1990s did result in a drop in the idle well count, the idle well count in recent years has stabilized or crept upward.

Since all wells within an AOR are evaluated for zonal isolation, idle wells are reviewed as part of the Division's UIC program. The Division's IWP is operated separately from the Division's UIC program. However, both programs share the common goal of resource protection.

FINANCIAL RESPONSIBILITY REQUIREMENTS

- *Bond amounts should be reviewed and updated periodically to cover current plugging and abandonment costs.*
- *The financial responsibility program should be modified to require bonds and other financial responsibility instruments be held until wells are plugged and abandoned.*
- *Operator funding requirements and the number of deserted wells plugged and abandoned should be increased to numbers that will significantly reduce the inventory of orphan/deserted wells each year.*

The current bonding amount requirements are specified in State statute passed by the legislature; these amounts are outdated and therefore insufficient. Additionally California oil and gas wells are not required to have life-of-the-well bonding. The Division is committed to working with the legislature, the oil and gas industry, and interested parties to bring bonding requirements up to reasonable standards.

To partially offset the financial liability to California's citizens from orphan wells, the legislature has provided the Division with funding for orphan well plugging and abandonments.

PLUGGING AND ABANDONMENT REQUIREMENTS

- *Cement plugs should be placed at the base of USDWS to ensure long-term protection from fluid movement into or between USDWs.*
- *The presence of a DIVISION inspector should be required during cement placement in P&A operations to monitor and ensure that adequate cement quality and adequate quantities are pumped into a well.*

The Division's mandates require resource protection. Because the Division's UIC program requires that the injected fluid remain confined to the intended zone and that all oil and gas zones are isolated, USDWs are protected from any harm caused by injection. These basic requirements have not changed since the Division was granted Class II primacy; however the Division will review them to determine if updates are necessary for USDW protection.

Division inspectors are present during well plugging operations. To address the volume of plugging operations, regulations require that Division staff witness either the plug placement or the plug tagging (location and hardness) to verify that the plugging operation was completed in accordance with State mandates.

UIC STAFF QUALIFICATIONS

- *UIC-specific training (e.g., EPA-sponsored UIC Inspector Training Course) should be provided to new and recent hires in the DIVISION UIC Program within one year of employment.*
- *Inspectors should be required to hold a petroleum engineering or geology bachelor's degree or related degree or equivalent college courses and relevant experience.*
- *Consideration should be taken to adjusting compensation and benefits for UIC professional positions to levels more consistent with the oil and gas industry.*

The work required from Division staff is based on geology and petroleum engineering, and the Division is taking steps to ensure that the most qualified individuals are hired and promoted.

In the UIC program, knowledge of geology and petroleum engineering are critical. In addition to the knowledge acquired through formal education, the Division is seeking individuals with experience relevant to the duties they will be performing.

The Division is assessing existing staff to identify weaknesses and is providing training to ensure that staff is knowledgeable in critical areas. In cases where staff lack the appropriate education, their job duties will be limited until they gain the necessary knowledge and skill sets.

The Division operates within the State's civil service compensation mandates. Salaries are negotiated with established bargaining units. The Division has interest in ensuring that compensation mandates meet our needs and will work with the administration to achieve our goals.

GENERAL AND DISTRICT-SPECIFIC RECOMMENDATIONS

Although this section of the Report listed specific cases in various District offices, the Division is responding in more general terms. The Division has had several meetings with staff to discuss and explain duties and expectations. It has been made clear to staff that these expectations will be enforced uniformly throughout the Division.

To address UIC shortcomings the Division aggressively pursued and was granted additional resources. The Division has focused on the evaluation of new and existing project applications, and field surveillance to ensure compliance. The recommendation to acquire software to aid staff with regulating UIC operations is being pursed along with other Division data management needs.

The Division's UIC program includes more than protecting USDWs and fresh water; the Division is also mandated to protect hydrocarbon zones from damage. Under our statutes, the protection of fresh water and USDW s coexists with the protection of hydrocarbon resources.

The Report recommends higher inspection priority for wells located near residential areas or when a USDW is present. Although inspection frequency is not addressed in regulations, additional staffing is augmenting Division resources for all UIC inspection needs. As indicated above, the Division's regulations do not distinguish between rural and urban injection wells. However, the Division does allocate additional resources to oil fields in highly urbanized areas.

Conclusion

The Division has been required to protect oil, gas, and water resources, since its inception in 1915. Some statutes have changed very little since that time. With changes in oilfield practices and advancements in technology, the Division has been slow to change its regulatory framework. Although the Division has a strong regulatory program, the Division is pursuing greater and more consistent enforcement.

In 2009, the Division began an in-depth evaluation of the UIC program and identified some barriers to full compliance. This was the first of many steps to bring the Division's program back into greater compliance with our mandates. The Division has already ensured greater UIC program compliance by:

- Providing staff greater understanding of UIC program mandates and staff expectations;
- Adding 43 additional staff to UIC and associate programs;
- Creating an internal audit program; and
- Requiring an additional technical review for UIC projects.

The Division acknowledges that some operators have operated UIC projects without meeting all the requirements outlined in statutes and regulations, and have resisted coming into full compliance. The Division is committed to bringing all operators into compliance.

The Division has not had significant changes to its UIC regulations since the original primacy application. Regulatory amendments will be pursued through a rulemaking process to address these needs. The Division's goal is to ensure our regulations are:

- adequate for protection of public health, the environment, and resources;
- adequate to address the UIC program mandates;
- flexible to address industry practices now and into the foreseeable future;
- created in a transparent process;
- predictable for the regulated community; and
- properly implemented and enforced.

Tim Kustic
State Oil and Gas Supervisor
November 2012

Enclosure B: Breakdown of Wells Potential Injecting into Non-exempt USDW Zones.

Enclosure B: Breakdown of Wells Potentially Injecting into Non-exempt USDW Zones and the Eleven Aquifers that have Historically Been Treated As Exempt

Breakdown review completed as of February 5, 2015

A. List of Water Disposal Wells – 532 Wells

Wells with…	Number of Wells	Number of wells issued orders	Number of wells (idle) in the 11 aquifers historically treated as exempt	Total Number of idle wells
Total Dissolved Solids (TDS) less than 3,000 mg/l	176	10	87 (20)	48
TDS between 3,000 and 10,000 mg/l	282	0	7 (4)	47
TDS under review or Data Requested	32	0	0	14
Subtotal	**490**	**10**	**94 (24)**	**109**
TDS greater than 10,000 mg/l (Wells being removed from list)	**42**			
Total	**532**			

B. List of Enhanced Oil Recovery Wells – 2021 Wells

Wells with…	Number of Wells	Number of wells issued orders	Number of wells (idle) in the 11 aquifers historically treated as exempt	Total Number of idle wells
Total Dissolved Solids (TDS) less than 3,000 mg/l	503	0	0	57
TDS between 3,000 and 10,000 mg/l	1327	0	0	225
TDS under review or Data Requested	157	0	0	62
Subtotal	**1987**	**0**	**0**	**344**
TDS greater than 10,000 mg/l (Wells being removed from list)	**34**			
Total	**2021**			

Enclosure C: Division and Water Board Aquifer Exemption Submittal and Review Process

Enclosure C: Division and Water Board Aquifer Exemption Submittal and Review Process

Division of Oil, Gas, and Geothermal Resources - Aquifer Exemption Submittal and Review Process

The Division of Oil, Gas, and Geothermal Resources (Division) is the state agency responsible for approving the injection of Class II fluid through an agreement with the United States Environmental Protection Agency (US EPA). Through this agreement, which is referred to as "Primacy", the Division is responsible for ensuring proposed zones of injection are exempt under the Safe Drinking Water Act and the criteria of 40 CFR 146.4. If an operator, or operators, wish to inject Class II fluid into a zone where the water quality is less than 10,000 mg/l TDS, and the zone has not been previously exempted, DOGGR will request data from the operator(s) to provide supporting documentation necessary to meet the aquifer exemption criteria as specified in 40 CFR 146.4 (see Exhibit A).

DOGGR's evaluation of the supporting documentation provided by the operator(s) must verify:

A) The aquifer does not currently serve as a source of drinking water.

This evaluation will/must include a survey of all water wells in the area of the proposed injection that are likely to have hydrologic conductivity with the zone of injection. Although the area of proposed injection may be smaller than the area of hydrologic conductivity, the supporting documentation must include data and hydrologic modeling that indicates the impacts of injection into the formation would not impact wells in the surrounding areas. Although this criteria states that the aquifer does not serve as a sources of drinking water, the State will evaluate this criterion to a higher standard, that of evaluating whether the aquifer is currently being used for beneficial uses.

B) The aquifer cannot now, and will not in the future, serve as a source of beneficial water because:

(1) The aquifer is mineral, hydrocarbon or geothermal energy producing, or can be demonstrated to contain minerals or hydrocarbons that considering their quantity and location are expected to be commercially producible.

Supporting documentation must include such data as: production data and/or maps generated using geophysical logs to indicate the oil/water contact of historic and/or current hydrocarbon production. To extent the area will include future hydrocarbon production, the supporting documentation must include definitive data of potential future hydrocarbon production.

(2) The aquifer is situated at a depth or location that makes recovery of water for drinking water purposes economically or technologically impractical.

Data must be provided that clearly indicates the depth of all impacted water that has the potential to be used for beneficial purposes. Based on current data, water wells are being drilled deeper and deeper because of the drought. Many wells are being drill below 4,000 feet. Because wells are being drilled increasingly deeper, supporting data must be current and accurate.

(3) The aquifer is so contaminated that it would be economically or technologically impractical to render that water fit for beneficial use.

The drought has forced people of the State to use water of lesser quality to meet their needs. Data provided to support the claim that the water is so contaminated that it would be economically or technologically impractical to render that water fit for beneficial use must be current and accurate. Although the initial application will be evaluated by DOGGR, the State Water Resources Control Board and the Regional Water Quality Control Board(s) will be providing their expertise in the final analysis.

(4) The total dissolved solids content of the ground water is more than 3,000 and less than 10,000 mg/l and other water quality constituents render the water to be of a certain quality that it is not reasonably expected to be used for beneficial uses.

During the process of evaluating the supporting documentation, the Division will confer with the State Water Board, and the operators as necessary to ensure the supporting data is accurate, up-to-date, and complete. Once the Division is satisfied with the supporting documentation, all supporting documentation, an application, and a draft letter to the US EPA requesting an aquifer exemption will be forwarded to the State Water Board for comment. If necessary, the Division and the State Water Board will meet and discuss the supporting documentation. Where appropriate, the operators affected by the proposed aquifer exemption may be included in meetings to clarify or to provide additional supporting documentation. If both the Division and the State Water Boards are in agreement, and if appropriate, the State Water Board will provide a written concurrence to the application.

Although timelines to prepare an aquifer exemption would be helpful, the variety in the complexity and size of each individual application makes it impossible to clarify a definitive timeline to prepare a specific application. However, it is the Division's goal to collect the necessary documentation, evaluate the supporting data, and provide a draft application to the State Water Board as soon as possible after receiving and verifying the required supporting documentation.

Once DOGGR and the State Water Board have reached an agreement to forward an aquifer exemption application to the US EPA, DOGGR will proceed with providing the appropriate public notification and solicit comments on the proposed aquifer exemption. Upon conclusion of the public comment period, and once comments have been appropriately addressed, the Division will forward the application to US EPA – Region 9.

State Water Resources Control Board - Aquifer Exemption Application and Review Process

Aquifer Exemption Application

1. Aquifer exemption applications, along with the Division of Oil, Gas, and Geothermal Resources' (DOGGR) recommendations are submitted to the State and Regional Water Quality Board (State Water Boards).
2. State Water Boards review the aquifer exemption application and DOGGR's recommendations (submittal review criteria detailed below). If necessary, this review may include meetings with DOGGR and operator(s) affect by the application. Review time will depend on the scale of the application and complexity of the proposed aquifer exemption (estimated 30 to 60 days).
3. State Water Boards and DOGGR will work towards reaching a consensus that the aquifer exemption application contains sufficient documented evidence to meet the criteria for an aquifer exemption. If additional information is required to justify an aquifer exemption, DOGGR and/or the State Water Board, depending on the information required, will request additional data from the affected operator(s). This is anticipated to take 15 to 30 days, depending on the data requested.

Every effort will be taken to work both with DOGGR and the affected operator(s) to resolve a lack of supporting data to justify an aquifer exemption.

Note: Review of an aquifer exemption application by the Water Boards is estimated to take 50 to 95 days. If additional information is required, the review process will be greater.

Review Process Criteria

The State Water Boards will review and evaluate the aquifer exemption application(s) in accordance with the following criteria:

1. Identification of underground sources of drinking water and exempted aquifers (Code of Federal Regulations, Title 40, Section 144.7)
2. U.S. Environmental Protection Agency (EPA) Guidance for Review and Approval of State Underground Injection Control (UIC) Programs and Revisions to Approved State Programs (Attachment 3: Guidelines for Reviewing Aquifer Exemption Requests)
3. EPA Aquifer Exemption Checklist
4. Technical demonstration by operator that the waste will remain in the exempted portion of the aquifer(s)

5. A review of current and future beneficial sources of water (e.g. domestic, municipal, irrigation, industrial)
6. Pertinent elements of Regional Water Board Basin Plan(s)

Upon conclusion of the State Water Boards review, the State Water Boards will provide one of the following findings:

a. If the State Water Boards concur with DOGGR that the aquifer exemption application meets the review criteria, the State Water Board will send a letter of concurrence to DOGGR, and copies to the affected operator(s). This is anticipated to take 5 days after concurring with DOGGR's recommendations.

b. If the State Water Boards concur that only portions of the aquifer exemption application meet the review criteria, the State Water Boards will send a letter to DOGGR and copies to the affected operator(s) requesting additional information. This is anticipated to take 5 days after making a determination.

c. If the State Water Boards conclude that the aquifer will not meet the criteria of an aquifer exemption, the State Water Boards will send a letter of its findings to DOGGR, with copies of these findings being sent to the affected operator(s). This is anticipated to take 5 days after making a determination.

Exhibit A - 40 CFR 146.4: Criteria for Exempted Aquifers

An aquifer or a portion thereof which meets the criteria for an "underground source of drinking water" in § 146.3 may be determined under § 144.7 of this chapter to be an "exempted aquifer" for Class 1-V wells if it meets the criteria in paragraphs (a) through (c) of this section. Class VI wells must meet the criteria under paragraph (d) of this section:

(a) It does not currently serve as a source of drinking water; and

(b) It cannot now and will not in the future serve as a source of drinking water because:

(1) It is mineral, hydrocarbon or geothermal energy producing, or can be demonstrated by a permit applicant as part of a permit application for a Class II or III operation to contain minerals or hydrocarbons that considering their quantity and location are expected to be commercially producible.

(2) It is situated at a depth or location which makes recovery of water for drinking water purposes economically or technologically impractical;

(3) It is so contaminated that it would be economically or technologically impractical to render that water fit for human consumption; or

(4) It is located over a Class III well mining area subject to subsidence or catastrophic collapse; or

(c) The total dissolved solids content of the ground water is more than 3,000 and less than 10,000 mg/1 and it is not reasonably expected to supply a public water system

(d) The areal extent of an aquifer exemption for a Class II enhanced oil recovery or enhanced gas recovery well may be expanded for the exclusive purpose of Class VI injection for geologic sequestration under§ 144.7(d) of this chapter if it meets the following criteria:

(1) It does not currently serve as a source of drinking water; and

(2) The total dissolved solids content of the ground water is more than 3,000 mg/1 and less than 10,000 mg/1; and

(3) It is not reasonably expected to supply a public water system.

Priorities, timelines and process

Taken in series, the sequence and timelines leading to a decision on aquifer exemptions will create a high level of concern that: 1. The body of work needing to be accomplished in a two-year period either cannot be managed, or, 2. The process will result in a large proportion of applications sent to US EPA in the final months of the period, without hope for resolution by February 15, 2017. Hence there is an essential need for the Water Board and DOGGR to work together in parallel as data are accrued by operators in support of exemptions to maximize parallel efforts and minimize serial efforts. To a large degree, such parallel work can only be possible if the data submitted are accurate, up to date and compiled in a readily accessible, standardized way. Further, the case for exemption must be rendered in a succinct, fact-driven form, supported by supporting data in appendices.

To facilitate an efficient workflow, DOGGR will establish a team of staff whose sole purpose will be to manage aquifer exemptions applications, and whose job it will be to know the status of any application at a given time and to work with operators to facilitate the development of a complete data set needed for the development of an aquifer exemption application to US EPA.

There are potentially as many as 100 aquifers for which portions are of interest to multiple operators and are likely candidates for consideration for exemption. Though a clear set of priorities is being developed in consultation with industry associations, who will assist in this effort, criteria that will drive priority consideration will include: date all data and justifications are certified as complete by DOGGR, impact on production levels within the state, impact on operator ability to produce, quality of the data submitted, timeliness of operator response to questions and data requests, and clarity of the case for exemption.

Enclosure D:
More Detailed Look At Administrative Concepts

ENCLOSURE D: MORE DETAILED LOOK AT ADMINISTRATIVE CONCEPTS

The following actions will be initiated through an appropriate combination of proposed rulemaking and enforceable orders.

1. Disposal into non-hydrocarbon producing zones[1] of aquifers that are clearly not exempt:

    a. No new disposal wells will be permitted unless and until EPA approves an aquifer exemption.
    b. Existing disposal wells:
        i. If potentially impacting water supply wells,[2] the Division will issue emergency order to operator to cease injection immediately. Water Board will issue an information order.[3]
        ii. If not potentially impacting water supply wells, and the aquifer is 3,000 mg/L total dissolved solids (TDS) or less, injection must cease no later than October 15, 2015 unless EPA approves an aquifer exemption. Water Board will issue an information order.
        iii. If not potentially impacting water supply wells, and the aquifer is more than 3,000 mg/L TDS and less than 10,000 mg/L TDS, injection must cease no later than February 15, 2017 unless EPA approves an aquifer exemption. Water Board will issue an information order. If there are supply wells in any portion of the aquifer, or if any portion of the aquifer is at a depth that may be reasonably expected to supply a public water system, the Division and the Water Board may issue orders on a higher priority basis.

2. Injection into hydrocarbon producing zones of aquifers that are clearly not exempt:

    a. If groundwater in the vicinity of the hydrocarbon producing zone does not currently have any beneficial use[4]

---

[1] Hydrocarbon producing zone is the portion of an aquifer that "cannot now and will not serve as a source of drinking water" because: "It is mineral, hydrocarbon or geothermal energy producing, or can be demonstrated by a permit applicant as part of a permit application for a Class II or III operation to contain minerals or hydrocarbons that considering their quantity and location are expected to be commercially producible." (40 CFR § 146.4 (b)(1).)

[2] Injection wells potentially impacting water supply wells include injection wells into aquifers with 3,000 mg/L total dissolved solids (TDS) or less that meet either of the following criteria: (1) the uppermost depth of the injection zone is less than 1500 feet below ground surface (regardless of whether any existing supply wells are in the vicinity of the injection well), or (2) the injection depth is within 500 feet vertically and 1 mile horizontally of the screened portion of any existing water supply well.

[3] Water Board information order will require that the operator submit information related to the injection and the quality of groundwater.

[4] Note that this does not include any use of produced water.

i. New wells that are part of an approved project may be permitted with the express condition that permit expires on February 15, 2017, unless EPA approves an aquifer exemption.
ii. For existing wells, injection must cease by February 15, 2017, unless EPA approves an aquifer exemption.

b. If groundwater in the vicinity of the hydrocarbon producing zone has any current beneficial use
   i. No new permits will be issued.
   ii. For existing wells, injection must cease by February 15, 2017 (or sooner, depending on the use of the groundwater), unless EPA approves an aquifer exemption.

3. Injection into eleven aquifers with disputed exemption status:

   a. No new disposal wells will be permitted unless and until EPA approves an aquifer exemption evaluation. An exception may be made in the unusual case where the proposed injection well is part of an approved project, and an initial screening of the target zone shows that the zone contains hydrocarbons, has very high levels of naturally-occurring constituents (e.g., arsenic or boron), or there are other factors that make it unsuitable for beneficial use.
   b. Existing disposal wells:
      i. If potentially impacting water supply wells, the Division will issue emergency order to operator to cease injection immediately. Water Board will issue an information order.
      ii. If not potentially impacting water supply wells, injection must cease no later than February 15, 2017, unless EPA approves an aquifer evaluation. Water Board will issue an information order. If there are supply wells in any portion of the aquifer, or if any portion of the aquifer is at a depth that may be reasonably expected to supply a public water system, the Division and the Water Boards may issue orders on a higher priority basis.

4. The Division will submit any exemption requests or evaluations for the above three categories of aquifers over time, and with sufficient opportunity for EPA to review the requests and approve or disapprove all of them by February 15, 2017.

EXHIBIT D

DEPARTMENT OF CONSERVATION

PUBLIC AFFAIRS OFFICE

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FOR IMMEDIATE RELEASE
NR#2015-06
April 2, 2015

Contact:
Teresa Schilling/Don Drysdale
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CALIFORNIA DEPARTMENT OF CONSERVATION ISSUES NOTICE OF EMERGENCY REGULATIONS FOR UNDERGROUND INJECTION

SACRAMENTO – The California Department of Conservation (DOC) today gave notice of an emergency rulemaking package to regulate underground injection related to oil and natural gas production. The emergency rulemaking puts in place concrete steps and deadlines agreed to by the U.S. Environmental Protection Agency for the Division of Oil and Gas Resources and the State Water Resources Control Board

"This is a significant step in California's commitment to ensure that underground injection practices comply with the federal Safe Drinking Water Act (SDWA) and to quickly eliminate risks to California's precious water resources," State Oil & Gas Supervisor Dr. Steven Bohlen said.

DOC's Division of Oil, Gas, and Geothermal Resources (DOGGR) has primary authority through the U.S. EPA to regulate underground injection wells related to oil and gas operations in California. In 2011, DOGGR raised concerns about underground injection, asking for an independent audit and alerting the Legislature and U.S. EPA to the audit's findings.

It was discovered that some injection was occurring into aquifers that had not been approved ("exempted") by the U.S. EPA under the terms of the SDWA. That discovery prompted last summer the beginning of an evaluation of all 50,000 injection wells in the state, with an immediate emphasis on those drilled into zones with the highest water quality.

The rulemaking sets in regulation a schedule the three government agencies have established to eliminate all injection into non-exempt aquifers and ensure California oil and gas activities are compliant with the SDWA. The regulations, available on DOC's website, will be provided to the Office of Administrative Law on April 9 to ensure they are in place no later than April 30.

Under the emergency regulations, the deadline to stop injecting into aquifers that do not naturally contain oil reservoirs and with water quality of less than 3,000 milligrams per liter/total dissolved solids (TDS) is October 15, 2015, or sooner if it appears that water supplies are possibly threatened. Injection into all other non-exempt aquifers with water quality of less than 10,000 TDS must cease by February 15, 2017. Injection into

eleven other specified aquifers with unclear exemption status must cease by December 31, 2016 if the U.S. EPA determines they should remain exempt. The SDWA does not apply to water with TDS greater than 10,000 TDS.

Injection can continue if the state applies for and receives an aquifer exemption from U.S. EPA. Even if an aquifer has very low TDS (the state and federal standard for drinking water is 500 TDS), an exemption may be granted if the water naturally contains oil or high levels of minerals such as arsenic or boron, making the water unfit for either drinking or agricultural use.

"Our agreement with U.S. EPA is to review all injection wells in the state," Bohlen explained. "Within the next few weeks the high-priority wells will be complete. If they are too close to a beneficial use well, we will issue an order to shut them down. We've already closed down 23 injection wells. We understand public concern about their water. To be clear, no contamination has been found related to oil and gas operations, but we're taking a conservative, cautious approach.

The Office of Administrative Law (OAL) has 10 working days to review the emergency regulations. OAL will consult with DOC before providing any response to comments. If OAL approves the rulemaking package, the interim rules will be in place at the end of the 10-day review. Information about the emergency rulemaking process can be found at http://oal.ca.gov/Emergency_Regulation_Process.htm.

Members of the public wishing to comment on the emergency regulations must do so directly to OAL within five calendar days of the posting of the proposed emergency regulations on the OAL website. Submit comments to:

Mail: OAL Reference Attorney
300 Capitol Mall, Suite 1250
Sacramento, California 95814

Fax: (916) 323-6826 E-mail:staff@oal.ca.gov

Those submitting a comment to OAL must also submit a copy to the Department:

Mail: Department of Conservation
801 K Street, MS 24-02
Sacramento, CA 95814
ATTN: Aquifer Exemption Emergency Rulemaking

Fax: (916) 324-0948 E-mail: UIC.regulations@conservation.ca.gov

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EXHIBIT E

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Center for Biological Diversity

IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA
IN AND FOR THE COUNTY OF ALAMEDA

CENTER FOR BIOLOGICAL DIVERSITY and SIERRA CLUB,

Plaintiffs/Petitioners,

v.

CALIFORNIA DEPARTMENT OF CONSERVATION, DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES, and DOES 1 through 100, inclusive,

Defendants/Respondents.

RG15769302

COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF AND VERIFIED PETITION FOR WRIT OF MANDATE

Plaintiffs and Petitioners Center for Biological Diversity and Sierra Club bring this action on their own behalf, on behalf of their members, on behalf of the general public, and in the public interest, and hereby allege as follows:

INTRODUCTION

1. During times of drought, California residents, municipalities and farmers increasingly rely on groundwater for drinking, irrigation and other beneficial uses. California is now experiencing one of the most severe droughts in history. In response to the dire water scarcity situation facing Californians, the Governor declared a statewide emergency and promulgated the state's first-ever mandatory water use restrictions earlier this year.

2. California and federal laws safeguard the state's dwindling supply of water resources by protecting underground sources of drinking water. The relevant laws protect not only aquifers that are currently being used for drinking water, but also aquifers containing groundwater that could be used for drinking water in the future. These laws are designed to prevent damage before it occurs. Strict adherence to these laws is crucial during dire circumstances like the current drought.

3. Despite the drought and these protections, Respondent California Department of Conservation, Division of Oil, Gas, and Geothermal Resources ("DOGGR") admits that for years it has improperly allowed thousands of wells to inject oil industry wastewater and other fluids into protected aquifers in violation of law. As a result, California aquifers have been contaminated.

4. Rather than shutting down the illegal activity, DOGGR has promulgated a new set of "emergency" rules (the "Aquifer Exemption Compliance Schedule Regulations") that purport to allow illegal injections in most cases until 2017. These rules turn the definition and purpose of a public emergency upside down by employing regulatory emergency powers to allow admittedly illegal injection into underground sources of drinking water ("protected aquifers") to continue for nearly two more years.

5. The true emergency is the ongoing contamination of California's underground supply of water. DOGGR has a nondiscretionary duty and legal authority to prevent and halt harm to these groundwater resources but refuses to take the necessary, immediate steps to protect them. Through this action, Center for Biological Diversity and Sierra Club seek to protect the state's groundwater

resources from further illegal contamination under the guise of DOGGR's sham "emergency" regulatory scheme.

6. Both the emergency regulations and the status quo fail to protect California's underground drinking water sources from harm. Since DOGGR continues to fail in implementing its regulatory duties, this Court must vacate the emergency regulations and ensure that DOGGR complies with the law by ordering DOGGR to take all immediate action necessary and available to it to meet its obligations to prohibit illegal injection of wastewater into protected aquifers.

PARTIES

7. Plaintiff and Petitioner CENTER FOR BIOLOGICAL DIVERSITY (the "Center") is a non-profit organization with offices in San Francisco, Los Angeles, and elsewhere throughout California and the United States. The Center is actively involved in environmental protection issues throughout California and North America and has over 50,000 members, including many throughout California. The Center's mission includes protecting and restoring habitat and populations of imperiled species, reducing greenhouse gas pollution to preserve a safe climate, and protecting air quality, water quality, and public health. The Center has a long history of environmental protection through science, policy, education, and legal advocacy in California, and through this action seeks to protect public health, safety, the environment, and the general welfare of Californians by requiring DOGGR to protect potential sources of drinking water from toxic oil-waste contamination.

8. Plaintiff and Petitioner SIERRA CLUB is a national non-profit corporation with approximately 620,000 members, roughly 146,000 of whom live in California. The Sierra Club is dedicated to exploring, enjoying, and protecting the wild places of the earth; to practicing and promoting the responsible use of the earth's ecosystems and resources; to educating and encouraging humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. The Sierra Club has been actively working in California and elsewhere to address the serious threats to public health and the environment related to the lack of oversight and safeguards for the oil industry.

9. By this action, the Center and Sierra Club seek to protect the public health and welfare and the environment. The Center's and Sierra Club's members and the general public have a

right to, and have a beneficial interest in, protection of underground sources of drinking water and DOGGR's compliance with the laws and regulations that protect these resources. These interests have been, and continue to be, threatened by DOGGR allowing the injections into protected aquifers to continue. Unless the relief requested in this case is granted, they will continue to be adversely affected and irreparably injured by DOGGR's failure to comply with the law.

10. Defendant and Respondent CALIFORNIA DEPARTMENT OF CONSERVATION, DIVISION OF OIL, GAS, and GEOTHERMAL RESOURCES ("DOGGR") is an agency of the state of California with offices in Sacramento, California. DOGGR is charged with the regulation of drilling, operation, maintenance, and plugging and abandonment of onshore and offshore oil, gas, and geothermal wells within the state of California. DOGGR has a duty "to[, among other things,] prevent, as far as possible, damage to life, health, property, and natural resources . . . and damage to underground . . . waters suitable for irrigation or domestic purposes by the infiltration of, or the addition of, detrimental substances." (Pub. Res. Code sec. 3106, subd. (a).)

11. The true names and capacities, whether individual, corporate, or otherwise, of DOES 1 through 100 are unknown to the Center and Sierra Club. The Center and Sierra Club will amend this Complaint and Petition to set forth the true names and capacities of said DOE parties when they have been ascertained. The Center and Sierra Club allege that each of said DOE parties 1 through 100 has jurisdiction by law over one or more aspects of oil and gas operations in California and their approval. The Center alleges that each of said DOE parties 1 through 100 are either Defendants/Respondents or Real Parties in Interest.

JURISDICTION AND VENUE

12. This Court has jurisdiction over this action pursuant to Code of Civil Procedure sections 525, 526, and 1085, Government Code section 11350, and California Constitution Article VI, section 10.

13. Venue is proper in this Court pursuant to Code of Civil Procedure sections 395 and 401(1) because DOGGR is a state agency and the California Attorney General has an office in Alameda County.

14. Pursuant to Code of Civil Procedure section 388, the Center and Sierra Club served the Attorney General with a copy of the Petition and Complaint along with a notice of its filing, and are including the notice and proof of service as Exhibit 1.

15. The Center and Sierra Club do not have a plain, speedy, or adequate remedy at law because the Center and Sierra Club and their members will be irreparably harmed by DOGGR's failure to enforce and comply with the law and by the ensuing environmental damage caused by DOGGR's illegal injections into protected aquifers.

State and Federal Requirements to Protect Drinking Water

16. In 1974, Congress enacted the Safe Drinking Water Act ("SDWA"; 42 U.S.C. § 300f *et seq.*; 40 C.F.R. § 144.1 *et seq.*) to ensure the quality of the nation's drinking water and to protect it from contamination. The SDWA includes, *inter alia*, an underground injection control ("UIC") program that governs the permitting, operation, and closure of injection wells that place fluids underground for storage, disposal, or enhanced oil and gas recovery.

17. The UIC program contains a specific program for "Class II" wells.

18. Class II wells include injection wells that dispose of waste fluids brought to the surface in the process of extraction of oil and gas, known as "produced water," and fluids used in enhanced recovery of oil or natural gas, such as "flowback fluids" resulting from well stimulation activities like hydraulic fracturing ("fracking") and steam injections.

19. Waste fluids, including produced water and flowback fluids, can contain harmful contaminants such as benzene, heavy metals, and other chemicals that are associated with adverse human health consequences, including cancer.

20. Under the SDWA, Class II injection wells may not inject into an aquifer—an underground geological formation containing water—unless the aquifer has previously been officially exempted from the protections of the SDWA.

21. The SDWA defines "underground sources of drinking water" to include non-exempt aquifers containing groundwater with less than 10,000 mg/L total dissolved solids ("TDS") at a quantity sufficient to supply a public water system. (40 C.F.R. § 144.3.)

22. An aquifer may be exempted only if (a) it does not currently serve as a source of drinking water; and (b) it cannot now and will not in the future serve as a source of drinking water. (40 C.F.R. § 146.4.)

23. In 1983, DOGGR received a grant of delegation from the U.S. Environmental Protection Agency ("EPA") to administer, implement and enforce the SDWA's requirements for the Class II UIC program in California. A Memorandum of Agreement ("MOA") between EPA and DOGGR sets forth DOGGR's regulatory responsibilities.

24. The MOA incorporates the requirements of the SDWA. The MOA states in unequivocal language that "an aquifer exemption must be in effect prior to or concurrent with the issuance of a Class II permit for injection wells into that aquifer." (Memorandum of Agreement (Sept. 29, 1982) ("MOA") at 6-7.)

25. The MOA also requires that DOGGR "adhere to the compliance monitoring, tracking and evaluation" pursuant to SDWA Section 1425 and "maintain a timely and effective compliance monitoring system including timely and appropriate actions on non-compliance." (MOA at 3.) DOGGR must perform "adequate recordkeeping and reporting" to "prevent underground injection which endangers drinking water sources." (42 U.S.C.A. § 300h-4, subd. (b).) The MOA additionally requires that DOGGR provide EPA with annual reports on the "recent operations of the Class II program." (MOA at 4.)

26. DOGGR's other oversight responsibilities with respect to Class II well operations include ensuring that permit applicants "satisfy [the] State that underground injection will not endanger drinking water sources." (42 U.S.C. § 300h(b)(1)(B); 42 U.S.C. § 300h-4(a).) Section 144.12 of Title 40 of the Code of Federal Regulations provides that "[n]o owner or operator shall construct, operate, maintain, . . . or conduct any other injection activity in a manner that allows the movement of fluid containing any contaminant into underground sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR part 142 or may otherwise adversely affect the health of persons." (40 C.F.R. § 144.12, subd. (a).) Section 145.11(a) of Title 40 of the Code of Federal Regulations requires that all state

UIC programs must have legal authority to implement and be administered in conformance with section 144.12. (40 C.F.R. § 145.11, subd. (a)(5).)

27. Under SDWA's state program delegation requirements, any state agency administering a Class II UIC program "shall have available" the ability "to restrain immediately and effectively . . . any unauthorized activity which is endangering or causing damage to public health or environment." (40 C.F.R. § 145.13, subd. (a)(1).)

28. The California Public Resources Code and the California Code of Regulations further define DOGGR's regulatory responsibilities in protecting aquifers from oil wastewater and other injected fluids.

29. Section 3106(a) of the California Public Resources Code requires DOGGR "to prevent, as far as possible, damage to life, health, property, and natural resources" and "damage to underground . . . waters suitable for irrigation or domestic purposes by the infiltration of, or the addition of, detrimental substances." (Pub. Res. Code § 3106, subd. (a).) Sections 3236 and 3236.5 of the Public Resources Code provide that an operator "who violates, fails, neglects, or refuses to comply with any provisions" of the Code (and, by necessary implication, its regulations) is guilty of a misdemeanor and may be fined $25,000 for each violation. (Pub. Res. Code §§ 3236, 3236.5.)

30. Section 1775 of Title 14 of the California Code of Regulations, which implements section 3106 of the Public Resources Code, also prohibits the disposal of "oilfield wastes" in a manner that may cause damage to "life, health, property, freshwater aquifers or surface waters, or natural resources, or be a menace to public safety." (14 C.C.R. § 1775, subd. (a).)

31. The California Code of Regulations also mandates that injection "shall be stopped" if there is evidence that "damage to life, health, property, or natural resources is occurring by reason of the project." (14 C.C.R. § 1724.10, subd. (h).)

Injection Wells in California

32. California's oil industry uses Class II underground injection wells for disposal of wastewater both from conventional oil and gas production and from so-called enhanced oil recovery well operations. Enhanced oil recovery wells themselves are also regulated as Class II underground injection wells.

33. A substantial portion of California's oil industry wastewater is disposed of via about 1,500 active wastewater disposal wells across the state, where it is injected underground.

34. This oil industry wastewater contaminates the aquifers into which it is injected with the chemicals and substances contained in it.

35. For example, wastewater can contain high levels of benzene, a known carcinogen.

36. DOGGR's own 1993 study of oil industry wastewater found that many of the study samples contained high levels of benzene. Tests for some samples detected benzene at concentrations thousands of times higher than the EPA limit for drinking water.

37. Many other harmful chemicals, including heavy metals, such as arsenic, are also present in oil industry wastewater.

38. Wastewater can also contain flowback fluid that returns to the surface after a well is stimulated using fracking and acidizing. These processes involve dozens of dangerous chemicals. After the fluid is used, it is typically sent to a Class II disposal well.

39. The oil industry's own chemical tests detected benzene and other toxic chemicals present in flowback fluid that operators recovered from production wells before sending the fluid to disposal wells. In the vast majority of tests submitted to DOGGR, benzene was detected at levels exceeding EPA's limit for drinking water.

40. Some 48,000 injection wells in California utilize so-called enhanced oil recovery techniques, which operate by pumping vast amounts of water or steam into the subsurface formation to increase the flow of oil to the surface.

41. Some enhanced oil recovery injection wells also operate illegally in protected aquifers.

42. Enhanced oil recovery techniques may combine injected steam with harmful chemicals used as surfactants. Enhanced oil recovery methods such as cyclic steam injection are also increasingly used in combination with well stimulation treatments such as hydraulic fracturing and acidizing, which use dozens of chemicals associated with adverse health effects.

43. Under DOGGR's Class II UIC program, both wastewater disposal well and enhanced oil recovery well activities may proceed only if injections occur into aquifers that have received

"exemptions" pursuant to SDWA regulations. "Non-exempt" aquifers are protected under state and federal law because they contain potential sources of drinking water.

44. Since at least 2011, DOGGR has been aware of serious and systematic problems with its UIC program.

45. In November 2012, DOGGR admitted that injection wells were operating in violation of the pertinent statutes and regulations.

46. It was not until three years after DOGGR became aware of deficiencies in the state's UIC program that DOGGR finally exercised its lawful authority and non-discretionary duty to order cessation of unlawful Class II operations, albeit only in very limited circumstances.

47. In July 2014, DOGGR issued orders requiring seven oil companies to cease injection at 11 wastewater disposal wells in Kern County, because "the disposal permits suspended may have allowed injection into aquifers that do not appear to have received the necessary 'exempt' designation from the U.S. EPA." (DOGGR, Press Release, California Department of Conservation, California's Oil Regulator to Review Underground Injection Control Program (July 18, 2014).)

48. DOGGR's shut-down orders stated that immediate cessation was necessary because "an emergency exists and . . . immediate action(s) are necessary to protect life, healthy, property, and natural resources, specifically, the further degradation of the affected aquifers . . . ." (Emergency Order to Immediately Cease Injection Operations, issued to CMO, Inc. Well(s): 03039980 and 03044445 by State of California Natural Resources Agency, Department of Conservation, Division of Oil, Gas, and Geothermal Resources (July 2, 2013).)

49. From July to September of 2014, DOGGR shut down an additional three injection wells, but rescinded its orders to cease injection for three of the originally halted injected wells.

50. On September 15, 2014, the State Water Resources Control Board ("State Water Board") determined that there were 108 water supply wells within a mile of the 11 wastewater disposal wells that were shut down. The State Water Board identified many more water supply wells located within a mile of injection wells that had not yet been shut down.

51. On February 6, 2015, DOGGR admitted that nearly 2,500 wells were injecting into non-exempt aquifers containing groundwater with less than 10,000 mg/L TDS, which meets the

water quality standard for underground source of drinking water under the SDWA, or for which the TDS level is unknown. Four-hundred ninety of these wells are wastewater disposal wells. Another 1,987 wells are enhanced oil recovery wells.

52. DOGGR admitted "that in the past it has approved UIC projects in zones with aquifers lacking exemptions. The Division has not kept up with the task of applying for the necessary aquifer exemptions ... required by statute .... The Division has thus been slow to reconcile the reality that industry has expanded the productive limits of oil fields established in the 1982 primacy agreement with SDWA requirements to obtain aquifer exemptions." (DOGGR Letter to EPA (Feb. 6, 2015) at 3.)

53. In March 2015, DOGGR requested the closure of 12 additional wastewater disposal wells. Eleven permits were voluntarily relinquished, and the twelfth was given a shut-down order.

54. Combined with the wells shut down in 2014, DOGGR has shut down 23 wells.

55. DOGGR continues to allow injection activity into the remaining 2,500 wells identified as operating in protected aquifers.

56. The agency is now performing a "review" of 30,000 Class II UIC wells. Such review is expected to be complete in 2016. "When completed, this review will serve to clarify records and improve data quality so that the full review of the UIC program can be completed." (DOGGR Letter to EPA (Feb. 6, 2015) at 4.)

57. Until review of all wells is complete, the full extent of noncompliance and of harm resulting from Class II well injections into protected aquifers cannot be fully known.

58. On February 6, 2015, DOGGR also stated that "[n]ew injections will be allowed" without obtaining aquifer exemptions first, and that DOGGR would only require these new injections to cease pursuant to DOGGR's phased compliance schedule "if no new exemption has been timely obtained." (*Id.* at 6.)

59. Appropriately, the California Legislature has become extremely concerned about the risks to California's groundwater sources posed by DOGGR's derelictions. On March 10, 2015, the California Senate Environmental Quality and Natural Resources and Water Committees held a joint

oversight hearing into the protection of groundwater and the effectiveness of California's Underground Injection Control Program.

60. The State Water Board, California's expert agency on issues relating to public water quality, testified at the oversight hearing.

61. On behalf of the State Water Board, the Chief Deputy of the State Water Board testified that the ongoing Class II well injections were contaminating the receiving aquifers: "Any injection into the aquifers that are not exempt has contaminated those aquifers . . . . What we found is that the aquifer, no surprise, has the material that was injected into it." (Joint Hearing Before California Senate Com. on Natural Resources and Water, and Senate Environmental Quality Committee, on Underground Injection Control Program (March 2015) at 74, testimony of Deputy of the State Water Board Jonathan Bishop.)

62. The State Water Resources Board Chief Deputy also testified that this contamination cannot be remediated: "We have a lot of history in addressing remediation of aquifers; and what I'll tell you is that you don't clean up aquifers, you contain the spread of contamination." (*Id.* at 73.)

63. Following the oversight hearing, eight members of the California Legislature wrote to Governor Brown expressing their acute concern about the situation. Their letter describes the current state of affairs: "Testimony at the hearing in conjunction with a recent report by CalEPA revealed that California's UIC program is broken and the state's groundwater resources are not being adequately protected. There have been decades of poor data management, lax and effectively incompetent oversight and implementation of UIC permitting and egregious administrative confusion by DOGGR and US EPA." (Cal. Legislature Letter to Gov. E. Brown (March 20, 2015) at 1.)

64. The legislators requested that "immediate" steps be taken to stop illegal injection into protected aquifers.

65. Instead of ordering the immediate cessation of all current illegal injections, on April 2, 2015, DOGGR proposed emergency "Aquifer Exemption Compliance Schedule Regulations" to allow these illegal injections to continue. Under these proposed rules:

a. Injections into aquifers in non-hydrocarbon bearing zones with less than 3,000 mg/L TDS may continue until October 15, 2015, and thereafter if an exemption is granted by that time;

b. Injections into one of eleven non-hydrocarbon bearing aquifers that were treated as exempt (when in fact they were not) may continue until December 31, 2016, and thereafter if an exemption is granted by that time;

c. Injections into non-hydrocarbon bearing zones with between 3,000 and 10,000 mg/L TDS may continue until February 15, 2017, and thereafter if an exemption is granted by that time; and

d. Injections into hydrocarbon bearing zones with under 10,000 mg/L TDS may continue until February 15, 2017.

(Notice of Proposed Emergency Rulemaking Action for "Aquifer Exemption Compliance Schedule Regulations" (April 2, 2015) at 3.)

66. DOGGR issued the emergency regulations under Government Code section 11346.1, subdivision (b), which allows an agency to adopt emergency regulations if it finds that an emergency situation "clearly poses such an immediate, serious harm that delaying action to allow public comment would be inconsistent with the public interest." (Cal. Gov. Code § 11346.1, subd. (a)(3).)

67. An "emergency" is a situation that calls for immediate action to "avoid serious harm to the public peace, health, safety, or general welfare." (Cal. Gov. Code § 11342.545.)

68. A finding of emergency under this section may not be based upon "expediency, convenience, best interest, general public need, or speculation." (*Ibid.*)

69. In its Notice of Proposed Emergency Rulemaking Action, DOGGR proffered two reasons for emergency rulemaking: (1) DOGGR's failure to phase out illegal injections by the stated compliance deadlines would "seriously jeopardize the federal government's ongoing approval of the State's UIC Program"; and (2) "codification of the compliance schedule as an emergency regulation will provide the level of certainty operators need in order to revise their business plans."

70. Neither so-called emergency identified by DOGGR addresses or concerns public welfare, health or safety.

71. The Office of Administrative Law ("OAL") posted the proposed regulations on its website on April 9, 2015, triggering a five-day public comment period.

72. The Center and Sierra Club each submitted timely comments, pointing out numerous deficiencies with the proposed emergency rules, including:

a. DOGGR did not provide substantial evidence of the existence of an actual "emergency" as defined by state law or show that the rules would address such an emergency;

b. The proposed regulations were contrary to existing state and federal law; and

c. The proposed regulations are unnecessary.

73. In response to public comments, DOGGR submitted to OAL a Revised Finding of Emergency, which proffered additional alleged justifications for the emergency rulemaking.

74. In its Revised Finding, DOGGR asserted that the decision to allow illegal and harmful injections to continue was actually beneficial to public health and safety. It asserted, without evidence, that "abrupt disruption" to the oil industry would be detrimental to general welfare.

75. On April 20, 2015, OAL approved the Aquifer Exemption Compliance Schedule Regulations adopting the proposed rules' deadlines for continuation of the illegal injections.

76. The new Aquifer Exemption Compliance Schedule Regulations are now in effect.

FIRST CAUSE OF ACTION

(Declaratory Relief – California Administrative Procedure Act Violations)

77. The Center and Sierra Club hereby incorporate all previous paragraphs by reference.

78. Under the California Administrative Procedure Act ("APA"), emergency regulations must be declared invalid if the facts recited in the finding of emergency "do not constitute an emergency." (Cal. Gov. Code § 11350(a).)

79. A regulation must also be "declared invalid" under the APA if "the agency's determination that the regulation is reasonably necessary to effectuate the purpose of the statute … or other provision of law that is being implemented, interpreted, or made specific by the regulation is not supported by substantial evidence." (Cal. Gov. Code § 11350, subd. (b)(1).)

80. The APA also requires that regulations meet standards of "consistency," "necessity," and "non-duplication" to be valid. (Cal. Gov. Code §§ 11350, subd. (a); 11349.1.)

81. The Aquifer Exemption Compliance Schedule Regulations fail to comply with APA requirements for emergency regulations.

82. The recited facts in DOGGR's Revised Finding of Emergency do not constitute or justify an emergency.

83. The Aquifer Exemption Compliance Schedule Regulations fail to meet the APA's consistency, necessity, and nonduplication standards.

84. The Aquifer Exemption Compliance Schedule Regulations are in conflict with, and violate, existing state and federal law because they allow continued illegal injection of oil wastewater into protected aquifers.

85. The Aquifer Exemption Compliance Schedule Regulations are also not reasonably necessary to effectuate the purpose of the laws protecting underground sources of drinking water.

86. Promulgation of the Aquifer Exemption Compliance Schedule Regulations was an abuse of discretion, unsupported by substantial evidence, and contrary to law. As a result, the Aquifer Exemption Compliance Schedule Regulations are invalid.

87. There is a present and actual controversy between Plaintiff and DOGGR as to the validity of the Aquifer Exemption Compliance Schedule Regulations.

88. The Center and Sierra Club desire a judicial determination of the rights and obligations of the respective parties concerning the allegations in this Complaint. "Any interested party may obtain a judicial declaration as to the validity of any regulation ... by bringing an action for declaratory relief in the superior court in accordance with the Code of Civil Procedure." (Cal. Gov. Code § 11350, subd. (a).)

89. Such a declaration is necessary and appropriate at this time in order that the Center and Sierra Club may ascertain the validity of the Aquifer Exemption Compliance Schedule Regulations, which are now in effect.

90. DOGGR's promulgation of the Aquifer Exemption Compliance Schedule Regulations irreparably harms and will continue to irreparably harm the Center and Sierra Club, their members,

and the public by DOGGR's failure to enforce and comply with the law and because of the ensuing environmental damage caused by DOGGR's illegal authorization of oil wastewater injection into protected aquifers.

SECOND CAUSE OF ACTION

(Writ of Mandate)

91. The Center and Sierra Club hereby incorporate all previous paragraphs by reference.

92. DOGGR has a non-discretionary duty under state and federal law, including the MOA, to prevent Class II well injections into protected aquifers. By allowing such injections to continue, and by enacting, implementing, and maintaining the Aquifer Exemption Compliance Schedule Regulations, DOGGR has failed to perform, and has violated, its non-discretionary duties.

93. DOGGR has acted unlawfully and beyond the scope of its statutory and regulatory authority as set forth in California and federal law.

94. DOGGR has also acted arbitrarily and capriciously and has abused its discretion.

95. DOGGR's actions described above are contrary to the public interest and, if permitted to remain in effect, will expose California's protected water resources to ongoing, irreparable contamination, degradation and harm.

96. The Center and Sierra Club have a beneficial interest in ensuring that DOGGR refrains from enacting, implementing and maintaining the Aquifer Exemption Compliance Schedule Regulations, and a beneficial interest in ensuring that DOGGR strictly follow state and federal law requirements, including its obligation to protect California's non-exempt aquifers from contamination and prevent harm to and degradation of non-exempt aquifer groundwater.

97. The Center, Sierra Club, and the public are irreparably harmed by DOGGR's failure to prevent Class II wells from injecting into protected aquifers, which causes irreparable contamination to California's protected aquifers, and by the Aquifer Exemption Compliance Schedule Regulations, which set aside environmental protections for invaluable drinking water sources in California and purport to legalize Class II well injections known to contaminate drinking water sources in California's aquifers.

98. The Center and Sierra Club have no plain, speedy and adequate remedy at law other than the relief sought herein.

99. Because the promulgation of the Aquifer Exemption Compliance Schedule Regulations is quasi-legislative in nature and not adjudicatory, the Center and Sierra Club bring this action under Code of Civil Procedure section 1085.

100. In the alternative, however, the Center and Sierra Club also seek a writ of mandate under CPP section 1094.5 to the extent, if any, that the Court concludes section 1094.5 is applicable here.

PRAYER FOR RELIEF

WHEREFORE, the Center and Sierra Club respectfully request that the Court:

1. Issue an order pursuant to California Government Code section 11350 declaring that the Aquifer Exemption Compliance Schedule Regulations are contrary to, in conflict with, and/or not reasonably necessary to effectuate the purpose of state and federal law;

2. Issue an order pursuant to California Government Code section 11350 declaring that the circumstances described in DOGGR's Revised Finding of Emergency do not constitute an "emergency" as defined under the California Administrative Procedure Act;

3. Issue an order pursuant to California Government Code section 11350 declaring that the Aquifer Exemption Compliance Schedule Regulations are void;

4. Issue preliminary and permanent injunctive relief requiring DOGGR to vacate and rescind the Aquifer Exemption Compliance Schedule Regulations;

5. Issue any other preliminary and permanent injunctive relief, as appropriate under California Code of Civil Procedure section 525, *et seq.*;

6. Issue a peremptory writ of mandate pursuant to California Code of Civil Procedure section 1085 declaring that DOGGR abused its discretion by allowing injections into protected aquifers;

7. Issue a peremptory writ of mandate pursuant to California Code of Civil Procedure section 1085 ordering DOGGR to take all actions necessary and available to it to immediately meet its non-discretionary duties to prohibit illegal injection of wastewater into protected aquifers;

8. Award Petitioners' fees and costs, including reasonable attorneys' fees and expert witness costs, as authorized by California Code of Civil Procedure section 1021.5, and any other applicable provisions of law; and

9. Grant such other relief as the Court deems just and proper.

Respectfully submitted,

DATED: May 7, 2015

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Center for Biological Diversity

VERIFICATION

I, Kathryn Phillips, declare:

I am the Director of Sierra Club California. I have read the foregoing complaint for declaratory and injunctive relief and verified petition for writ of mandate against the California Department of Conservation, Division of Oil, Gas and Geothermal Resources, and know the contents thereof. The same is true of my own knowledge, except as to those matters which are therein stated on information and belief, and, as to those matters, I believe it to be true.

Executed May 6, 2015 in Sacramento, California.

I declare under penalty of perjury that the foregoing is true and correct.

Kathryn Phillips

EXHIBIT 1

EARTHJUSTICE

ALASKA CALIFORNIA FLORIDA MID-PACIFIC NORTHEAST NORTHERN ROCKIES
NORTHWEST ROCKY MOUNTAIN WASHINGTON, D.C. INTERNATIONAL

May 6, 2015

Via U.S. Certified Mail, Return Receipt Requested

Hon. Kamala Harris
Office of Attorney General
1300 "I" Street
Sacramento, CA 95814-2919

Re: *Center for Biological Diversity and Sierra Club v. Department of Conservation, Division of Oil, Gas, and Geothermal Resources et al.*

Dear Attorney General Harris:

Pursuant to California Civil Code of Procedure section 388, I hereby notify you that the Center for Biological Diversity and Sierra Club intend to file suit in Alameda County Superior Court against the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources ("DOGGR") and DOES 1-100 for declaratory and injunctive relief.

As stated in the attached Complaint for Declaratory and Injunctive Relief and Verified Petition for Writ of Mandate, we are challenging DOGGR's adoption of "emergency" regulations related to the ongoing injection wells found to have been operating in protected aquifers around the state. We also ask the Court to issue a writ of mandate that, *inter alia*, orders DOGGR to take all actions necessary and available to it to immediately meet its non-discretionary duties to prohibit illegal injection of wastewater into protected aquifers. The enclosed Complaint and Petition will be filed on or about May 7, 2015.

I hereby swear under penalty of perjury that I have caused this letter and attachment to be placed in the mail in San Francisco, CA, prepaid, on May 6, 2015.

Sincerely,

William B. Rostov
Tamara T. Zakim

Attorneys for Plaintiffs/Petitioners

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EXHIBIT F

IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA
COUNTY OF ALAMEDA
HONORABLE GEORGE C. HERNANDEZ, JUDGE
DEPARTMENT 17

CENTER FOR BIOLOGICAL DIVERSITY, and SIERRA CLUB, nonprofit corporations, Petitioners, vs. CALIFORNIA DEPARTMENT OF CONSERVATION, DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES, and DOES 1 through 20, inclusive, Respondents.	CASE NO. RG15769302
AERA ENERGY, LLC; BERRY PETROLEUM COMPANY, LLC; CALIFORNIA RESOURCES CORPORATION; CHEVRON U.S.A., INC.; FREEPORT-MCMORAN OIL & GAS, LLC; LINN ENERGY HOLDINGS, LLC; and MACPHERSON OIL COMPANY, Respondents in Intervention.	

REPORTER'S TRANSCRIPT OF PROCEEDINGS
July 2, 2015

Reported by: DREW E. COVERSON, C.S.R. 10166
Court Reporter

A P P E A R A N C E S

FOR PETITIONERS:

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FOR DEFENDANTS, WESTERN STATES PETROLEUM ASSOCIATION; CALIFORNIA INDEPENDENT PETROLEUM ASSOCIATION AND INDEPENDENT OIL PRODUCERS AGENCY INDUSTRY:

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(APPEARANCES CONTINUED)

FOR THE STATE OF CALIFORNIA
DEPARTMENT OF JUSTICE
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THE REPORTER: I cannot understand what you are saying.

MR. ROSTOV: Sure.

I will discuss the statutory framework and then the plaintiffs' likelihood of success on the merits, and then I'll explain the irreparable harm from the contamination of the aquifers. I'll explain how that contamination outweighs any claim of economic harm from the oil industry and any regulatory burden on the Division.

In discussing these issues, I hope to answer the questions that this Court raises in the tentative ruling. So first let me start with the statutory framework. There's a clear, undisputed framework of the federal Safe Drinking Water Act.

The Safe Drinking Water Act is a preventative statute that's deemed to stop harm before it occurs. The intent in creating the Safe Drinking Water Act was to ensure that aquifers are protected from industry operations, including the injections at issue here today.

You review first to ensure no harm. This is done through a robust exemption process, which the Division and industry admits has not been done here. No one disputes that under the Safe Drinking Water Act

that there is a flat prohibition on Class II wells from injecting into underground sources of drinking water unless there's an aquifer exemption in place that has been approved by both state and federal authorities.

In California, no one disputes that the memorandum of agreement, the agreement between the United States Environmental Protection Agency, EPA and the Division set forth how the Division implements this law -- the federal law.

No one disputes that the federal law defines these underground sources of drinking water to include all nonexempt aquifers containing groundwater with less than 10,000 milligrams per liter of total dissolved solids at a sufficient quantity to supply a public water supply system. I'll refer to this as the "federal standard."

The Division has confirmed that aquifer exemptions must be obtained first before any injections into underground sources of drinking water may occur. For example, on page 9 of the notice of proposed rulemaking, which is the Zakim declaration, Exhibit I, the Division explicitly states that the aquifers that meet the federal definitions are, and I'm quoting:

"Subject to protection as underground sources of drinking water unless and until they are covered by

an aquifer exemption. To be very clear, failure to comply with this exemption requirement of the Safe Drinking Water Act is a violation of the law."

So not having the exemptions is a violation of the law. In that same paragraph of the notice of rule that I just quoted -- I'm also going to quote. It says, "The Division's allowance of injection wells into nonexempt underground sources of drinking water conflicts with the terms of the Division's primacy agreement with the US EPA, which defines the parameters of the states' federally approved underground injection control program."

So essentially DOGGR has admitted that they are out of compliance with the Safe Drinking Water Act. The attachments to the Division's May 15th letter to EPA identify wells that do not have an aquifer exemption. The titles of the attachments are instructive.

Attachment B is entitled "Class II Water Disposal Wells Permitted to Inject into Nonexempt-Non-Hydrocarbon-Bearing Aquifers."

Attachment C is entitled "207 Wells Injecting into Aquifers that are Reasonably Expected to Supply a Public Water Supply System."

The Division has a specific list of wells.

This goes to your question about the scope of the injunction. The Division has a specific list of wells that are operating without exemptions. So since these wells are operating without exemptions, these wells are currently in violation of the Safe Drinking Water Act.

The oil companies are very familiar with this list as their own declaration cites to the list and specifies that the various companies have over 2,000 wells that are currently injecting into these nonexempt aquifers. So this list actually defines the scope of the injunctive relief we want on the second cause of action.

The first cause of action is enjoining a preliminary injunction on the emergency regulations and declare them void. The legal framework of review is review first before allowing anything to go into a protected aquifer is simple. You review first, and then you allow the injections only if the exemption process is completed and there's approvals from state and federal authorities and public process.

Although this legal framework is simple, the hydrology and geology of aquifers is very complicated. There are many pathways in which contamination can occur: Direct injection into an aquifer, there's movement of contaminant from one aquifer to another,

there's fracturing of an aquifer.

We put in a declaration of Timothy Ginn that provides an extensive discussion on this. I think it's easier to think about it as the legal framework in terms of an analogy. I would use the analogy of the FDA. The FDA essentially does extensive studies before it allows drugs to be marketed. It approves it, and if it approves it, only then allows it to be marketed.

When they are doing the studies, they also study the interactions of that one drug with other drugs. So in other words, they are looking at the synergistic effects. The same thing needs to be thought of here. Once you inject in, there's many things that can happen.

And that's why the Court -- United States versus King. I'll cite the case. It's 660 F.3d 1071, 1079 held that it's presumed that, quote, "The injection is a danger of underground sources of drinking water until shown to be safe." So you need the robust exemption process before you allow the injections.

And I just want to go over the exemption process real fast; Slowly for the court reporter. The exemption process requires the submissions of extensive information about the geology and hydrology of the

formation of an aquifer. After it is submitted from an operator, Mr. Dintzer's client, there's a public process with public comments -- first after submitted, the Water Board and the Division need to review it and approve the application. During that, they also have a public process before approval.

And if the approval is put in place by the state agency, then it's forwarded to EPA for its evaluation and approval. All of this must occur before an injection well is allowed to operate in an aquifer. And obviously, given the description of the process, there's no guarantee that exemptions will ever occur. You have public process. Might not be enough information for the oil companies.

So I'm getting to the crux of the case here, and that is our concern that injections are occurring into protected aquifers where no exemptions have been obtained. Thus, threatening both current and future drinking water sources.

The tentative ruling talks about how the plaintiffs failed to separate between procedural and substance of the statute, but our point is the statute is both procedural and substantive. So it's procedural in the sense there's a process, and there's a process where you have to do exemptions before injection. So

that's procedural.

It's also substantive at the same time because the statute prevents the injections until proven safe. So if you don't have a process and the approval process and an approval of an aquifer becoming exempt, you cannot allow the exemption.

The Court has questioned the legality of the Division's action. And we really think the emergency regulations are the best evidence of the Division's failure, the regulations they proposed.

The notice of approval states, and I'm just going to quote it, because I think it's very important. It's Exhibit 9 to the Zakim declaration, "This rulemaking action establishes deadlines for the oil and gas industry to obtain aquifer exemptions in an effort to bring California's Class II underground injection control program into compliance with the federal Safe Drinking Water Act."

The Division admits that it's out of compliance, that there are injections into nonexempt wells. The tentative ruling states that the regulations do not affirmatively authorize injections into drinking water sources.

As just described, the regulations do allow thousands of wells to continue injecting into

underground sources of drinking water that the Division itself has identified for meeting the federal water quality standard for protection.

Another point of the tentative, it also says that the regulations, and I'm going to quote it, "Sets deadlines for industry actors to satisfy the Division by dates certain that injections are not causing harm so that existing permits are not rescinded or exemptions, if not previously given, can be granted."

If the regulations do this, as the Court is saying, this is exactly opposite of what the Safe Drinking Water Act requires.

The showing of no harm must occur first, not later. Drinking water can't be injected into until then. This, once again, is similar to that FDA analogy I made. You have to study the drugs before you allow them into the market. You have to study where the injections are going before you allow the injections.

An aquifer is nonexempt if it's not gone through the exemption process. Here injections are being allowed before the exemptions are in place. Moreover, the emergency regulations allow these injections which, by definition, under the Act do cause harm. I'll talk about that a little more in the balancing harm section.

But first I just want to address the illegality of the emergency regulations and go through that and work my way through the other questions in the tentative. So it is true, as the Court notes, that the regulations are designed to allow time for aquifer exemptions to be granted, but there's a fundamental flaw with the Division's approach.

The Division does not have the authority to issue these emergency regulations in the first instance, because the Safe Drinking Water Act doesn't give a state authority to undermine the Act's requirements. That's what this provision does -- these regulations do.

The Division is required to collect information first and then do the aquifer exemptions. These regulations permit continued contamination of the protected underground sources of drinking water instead of protecting them until further review, the exact opposite of what the Act requires.

This, by itself, should sink the emergency regulations. The Division has no authority to adopt regulations that conflict with the Safe Drinking Water Act and the primacy agreement. And we cited in our papers a case called Canteen, which stands for that proposition. That's a proposition that's well-known in

law in general.

Furthermore, these regulations are invalid, because they do not effectuate the purpose of the Act, which requires exemptions to be in place before allowing injections.

This is also opposite the cases we cited where the state adopted emergency regulations to come into immediate compliance with federal law. Here, the cases we cited -- one of the cases, but there's a bunch them -- Doe versus Wilson is an idea where the federal government changed Medicare regulations, and the state needed to comply with the new Medicare regulations, so they did an emergency regulation to come into compliance. The state said they didn't -- that was permissible. Essentially, the state can change and use emergency regulations to come into compliance with the law, but what DOGGR is doing is the opposite.

Here, the regulations delay compliance. The true -- here, the regulations delay compliance and turns the intent of the Safe Drinking Water Act really upside down by permitting the injections first into these nonexempt aquifers.

If the regulations did what the agency did in Doe, which is the case I just mentioned, and ordered immediate compliance with federal law, which is what we

are here arguing for, then they would conform with the Safe Drinking Water Act.

In granting Plaintiffs' request of relief, and ordering the Division to come into immediate compliance, the Division could, in fact, promulgate emergency regulations, like in Doe, to immediately lead to the stopping of these illegal injections, and the Court references the permanent rulemaking.

I think it's really important to note about the permanent rulemaking that there's nothing more -- those rules are nothing more than a final version of the emergency regulation. They allow the same unlawful conduct, have the same timetable, and they suffer from the same fatal flaw, that the Division lacks the authority to issue them in the first place.

Also, I want to now turn to the emergency findings themselves. So the emergency findings do not support an emergency. The standard for emergency comes from Sonoma. And the standard says, "There must be a situation of grave character and serious moment."

Our position is the real public health emergency is the drought and the harm caused by the regulations allowing the continued contamination of these underground sources of drinking water that are protected by the Safe Drinking Water Act. These

underground sources of drinking water are becoming scarcer and scarcer because of the drought.

The Division also justifies the regulations based on private harm to the oil industry. The standard for emergency regulations is to protect public health and welfare, not private interest. That is not a legitimate reason for emergency regulations.

The tentative ruling states that the emergency regulations provide new rules for information collection, but this is not right. The Division already has power to review the injections, and it has been doing so on-case-by-case basis.

They identify more than 2,500 injections in nonexempt aquifers, and it has continued its review as recently as May 15th, as evidenced by a letter from the Division and the Water Board to EPA. They reviewed all the Class I injection wells, and they also identified 3,600 cyclic steam injection wells that didn't even have -- potentially didn't even have permits.

The Division has gathered the information already through it's case-by-case analysis of all these wells. The Division has gathered enough information with regard to 2,500 wells at issue, and now it needs to follow the law. It needs to follow the dictates of the Safe Drinking Water Act.

The Division also argues that it might lose primacy. In other words, the EPA may take away its program. The Division hasn't shown that losing primacy justifies emergency. And even if it did, what we are proposing makes it more possible for the Division to maintain primacy. The EPA wants this problem changed now, not in the future.

So notwithstanding any deference the Court gives to the finding of the emergency regulations, the regulations violate the Safe Drinking Water Act, as I described earlier, and that fundamental flaw means regulations can be struck down no matter what.

Now we'll discuss our second cause of action. The whole discussion I've had up to now about the statutory framework really makes the point of our second cause of action, that the Division is abusing its discretion by allowing thousands of injections to occur first and assessing the harm of these injections second.

The Division's mandatory duty to prohibit injection in nonexempt aquifers is explicitly set forth in the primacy agreement, which reflects congressional intent.

I'm now going to discuss some of the cases Your Honor raised in the tentative ruling. The AIDS

Health Care Foundation case actually defines the mandatory duty. It reminds us that, quote, "Correct an agency's abuse of discretion where the action that's being compelled is ministerial." Then it defines the ministerial act, which is one where the agency, quote, "Is required to perform in a prescribed manner, without regard to its own judgment or opinion concerning such act's propriety."

What we have here is exactly that: An act that the Division is required to perform in a prescribed manner. The Division must obtain exemptions before allowing the injections. There is no discretion under the Safe Drinking Water Act or the memorandum of understanding for the Division to apply its judgment to do things in a different order.

California Trout is a case that the Court should rely on, and we believe it's instructive. There the Court found that certain conditions were required to apply to licences for the diversion of water in ^ County. This was a mandatory requirement.

So as a result, the Court issued a writ to force the Water Board to comply with the mandatory duty as set forth by the statute. There is no discretion in the statute. The statute provided no discretion to the Water Board. As a matter of fact, that writ changed

the terms of the licenses of the permitting operator and, essentially, reduced steam flows.

The same would be true in this case. The Division has a nondiscretionary duty to prohibit injections into nonexempt aquifers. Yet, the Division also admits that it's violating this duty for thousands of wells by not having aquifer exemptions in place.

So as the court in the California Trout states at Cal.App.3d 203 "An administrative agency has no discretion to engage in an unjustified unreasonable delay in the implementation of statutory commands." Cal. Trout says an agency cannot rely on enforcement discretion to avoid mandatory duties. That's what we have here.

This is not like the facts in the AIDS Health Foundation case. The mandatory duty in that case, unlike the mandatory duty here, was explicitly limited -- was really imbued with agency discretion.

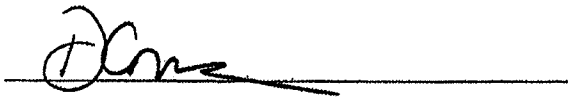
The defendant LA County Department of Public Health has a mandatory duty to take measures that are, quote/unquote, "reasonably necessary to prevent the spread of disease." There the underlying mandatory duty already allowed for discretion.

This is also not like the case in Schwartz, where there's no mandatory duty even found. Unlike the

STATE OF CALIFORNIA)
) ss.
CONTRA COSTA COUNTY)

I, DREW E. COVERSON, Certified Shorthand Reporter, do hereby certify that as such I took down in stenotype all of the proceedings in the within-entitled matter, CENTER FOR BIOLOGICAL DIVERSITY and SIERRA CLUB, nonprofit corporations vs. CALIFORNIA DEPARTMENT OF CONSERVATION, DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES, and DOES 1 through 20, et. al, heard before the Honorable GEORGE C. HERNANDEZ, JUDGE, on JULY 2, 2015, and that I thereafter transcribed my stenotype notes into typewriting through computer-assisted transcription, and that the foregoing transcript constitutes a full, true, and correct transcription of the proceedings held at the aforementioned time.

IN WITNESS WHEREOF, I have hereunto subscribed my name this date, July 10th, 2015.



DREW E. COVERSON
Certified Shorthand Reporter #10166

EXHIBIT G

SUPERIOR COURT OF THE STATE OF CALIFORNIA
COUNTY OF ALAMEDA
BEFORE THE HONORABLE GEORGE C. HERNANDEZ, JUDGE
DEPARTMENT 17

CENTER FOR BIOLOGICAL DIVERSITY, and SIERRA CLUB, non-profit corporations, Petitioners, vs. CALIFORNIA DEPARTMENT OF CONSERVATION, DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES, and DOES 1 through 20, inclusive, Respondents.	CASE NO. RG15769302
AERA ENERGY LLC, BERRY PETROLEUM COMPANY, LLC, CALIFORNIA RESOURCES CORPORATION, CHEVRON U.S.A., INC., FREEPORT-MCMORAN OIL & GAS, LLC, LINN ENERGY HOLDINGS, LLC, and MACPHERSON OIL COMPANY, Respondents in Intervention.	

REPORTER'S TRANSCRIPT OF PROCEEDINGS
SEPTEMBER 30, 2015
REPORTED BY: KATHRYN LLOYD, CSR NO. 5955
HUTCHINGS NUMBER 590828

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--oOo--

immediate -- through mandamus -- immediate revocation of those permits and reissuance of those permits with the proper conditions that complied with the Fish and Game Code, this legal mandate that they had found.

And in doing so, they rejected the argument that these legal requirements could be disregarded while the agency and the operators slowly came into compliance.

And the court rejected claims by both the State Water Board and the operators that immediate compliance could be unreasonable and unattainable.

And this is what's interesting, is that the court not only ordered immediate compliance, but the Court of Appeals instructed the lower court to make interim decisions regarding water flows for those licenses until the agency that was challenged could get into compliance.

So I highlighted here to show exactly how broad mandamus is. And I think the court said it best at the end in that case, which was that the court cannot ignore the ongoing violations of a statutory mandate on grounds that violations will eventually be halted by an untimely action.

Now plaintiffs have alleged several theories of liability -- or several theories by which

mandamus could lie in its second cause of action.

And I just wanted to go through them because if the court finds any of those theories is valid, at the demurrer stage, at the pleading stage, then the demurrer should be overruled.

And I want to just make clear in doing this, I'm not asking the court right now to determine if the relief requested is valid, just if there is a legally possible claim at this point.

So the first of the five theories. The first violation that we are alleging that DOGGR committed is the refusal to shut down all of the improperly permitted wells immediately.

These are wells that are currently operated under permits that DOGGR itself admits must be unwound, but yet has done nothing to unwind all of them yet.

DOGGR's second violation is the act of issuing the emergency regulations, which affirmatively authorized continued use of wrongfully issued permits to allow the injection of oiled water and enhance recovery water and produce water into aquifers without exemptions for another two years.

So it affirmatively authorized that. And we are holding that that act in and of itself

violates this mandatory duty set forth in the Underground Injection Control Program that you can't issue any permits until and unless an aquifer exemption is in place.

The third theory is that should the court find that these emergency regulations are indeed invalid under our first cause of action, DOGGR will be in a position where it has failed to act.

And DOGGR here continues to try and justify its actions to date saying, well, we've issued these emergency regulations to try and solve the problem on this two-year time frame.

But if the court finds that those emergency regulations were unlawfully issued, and unlawfully issued to correct unlawful behavior, then DOGGR is still going to be in this place where they have failed to act and comply with this duty regarding exemptions.

And in the demurrer stage, it's too premature. You haven't yet gotten to the merits of the first cause of action. And so that could be a cause of action for our second claim.

Fourth --

And the last two theories actually go to this issue of new permits.

DOGGR has declared an intent to continue to issue these permits without exemptions until 2017. And it is our position that that right there, that issuance of new permits, violates this mandatory duty they have to not do that until exemptions are in place. And that's exactly the kind of legal duty that violated that mandamus is meant for, and the kind of violation that a court like this one could order prohibitive relief and ensure that does not happen.

And what is amazing when you think about it is that they are actually potentially enlarging a problem that they say they are desperately trying to solve and minimize by allowing issuance of these new permits.

And the fifth theory, again, is around these new permits, that they are declaring they could issue in the next two years, their actions in total are arbitrary and capricious.

They have issued these emergency regulations on the premise, as they admit that they have issued them improperly, and they must be unwound, and yet here they are stating that they are going to issue new permits without exemptions until 2017.

And that conflict, that inconsistency, that's like the height of arbitrary and capricious behavior on the part of an agency.

Your Honor, the very purpose of mandamus is to allow courts to review agency actions when it violates certain legal duties.

And DOGGR is, in essence, telling this court that because of how it assumed responsibility for this federally mandated program, that none of its actions can be reviewed by a court, that the only means by which to challenge any actions is by suing EPA and federal court to revoke their entire program.

Such a position not only turns mandamus actions on its head, but it turns federal state delegation on its head.

Plaintiff has hopefully shown the court what the legal duty is and where it is found in the Underground Injection Program that DOGGR implements and enforces, and is showing the breadth of mandamus and how the power of mandamus can be used to reply to the various acts that were recently undertaken here by DOGGR.

And with that, we would submit and request that the DOGGR's demurrer be overruled.

Thank you.

State of California)
)
County of Alameda)

I, KATHRYN LLOYD, Certified Shorthand Reporter for the State of California, do hereby certify:

That I was present at the time of the above proceedings;

That I took down in machine shorthand notes all proceedings had and testimony given;

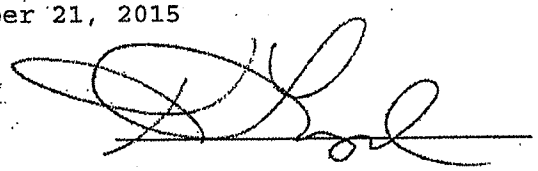
That I thereafter transcribed said shorthand notes with the aid of a computer;

That the above and foregoing is a full, true and correct transcription of the said shorthand notes, and a full, true and correct transcript of all proceedings had and testimony taken;

That I am not a party to the action or related to a party or counsel;

That I have no financial or other interest in the outcome of the action.

Dated: October 21, 2015



Kathryn LLoyd, CSR No. 5955

EXHIBIT H

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Califonia Department of Conservation, Division of Oil, Gas, and Geothermal Resources

Superior Court of California, County of Alameda
Rene C. Davidson Alameda County Courthouse

Center for Biological Diversi Plaintiff/Petitioner(s) VS. Califonia Department of Con Defendant/Respondent(s) (Abbreviated Title)	No. RG15769302 Order Motion for Preliminary Injunction Denied

The Motion for Preliminary Injunction filed for Sierra Club and Center for Biological Diversity was set for hearing on 07/02/2015 at 02:30 PM in Department 17 before the Honorable George C. Hernandez, Jr.. The Tentative Ruling was published and was contested.

The matter was argued and submitted, and good cause appearing therefore,

IT IS HEREBY ORDERED THAT:

The Motion of Plaintiffs/Petitioners Center for Biological Diversity et al. ("Plaintiffs") for Preliminary Injunction is DENIED, for the reasons that follow.

Plaintiffs attack the validity of emergency regulations enacted by Respondent/Defendant California's Division of Oil, Gas and Geothermal Resources ("DOGGR" or "Defendant") on April 20, 2015, under two legal theories. First, Plaintiffs allege that the emergency regulations are invalid under the Administrative Procedures Act. Plaintiffs contend that the facts recited in the finding of emergency do not, in fact constitute an emergency, and that the finding of necessity is not supported by substantial evidence. Second, Plaintiffs seek a writ of mandate on the grounds that DOGGR has failed to perform ministerial duties required by law, i.e., that applicable law (the Federal Safe Drinking Water Act, SDWA) and implementing regulations do not allow DOGGR to permit injections into non-exempt aquifers and require DOGGR to take specific enforcement action against all violators.

APPLICABLE LEGAL STANDARD. The standard for issuance of a preliminary injunction is well-established: The court must weigh two interrelated factors: (1) the likelihood that the moving party will ultimately prevail on the merits and (2) relative interim harm to the parties from issuance or nonissuance of the injunction. (See, e.g., Butt v. State of California (1992) 4 Cal.4th 668, 677-78.) The greater the Plaintiffs' showing on one factor, the less must be shown on the other to support an injunction. (Id. at 678.) The court cannot grant a preliminary injunction unless there is some possibility that the Plaintiffs would ultimately prevail on the merits of the claim. (Id.)

Plaintiffs suggested that because the underlying statutory framework is preventative in nature, presuming harm by making injections unlawful unless and until an exemption is obtained, Plaintiffs need only show that they are likely to prevail on the merits. However, People ex rel. San Francisco Bay Conservation etc. Com. v. Smith (1994) 26 Cal.App.4th 113 does not clearly dispense with the balancing-of-harms requirement; there, the court cited to record evidence of continuing violations causing actual harm (impeding public use of bay waters) and found this was sufficient to support an injunction. Further, Plaintiffs have not pointed to any statutory provision, in the SDWA or otherwise,

specifically authorizing an injunction without any determination regarding the relative hardships. (Compare, e.g., Health & Safety Code §§ 25184, 111910.) Even if such a provision existed, a showing of probable merit would only give rise to a presumption that the potential harm to the public outweighs the potential hardship to defendant, which Defendant may rebut. (IT Corp. v. Cnty. of Imperial (1983) 35 Cal.3d 63, 72.)

ANALYSIS. Because, as discussed below, the balance of harms heavily favors the public and the State, the court assumes arguendo that Plaintiffs are likely to prevail on one or more of their legal theories.

The question presented is which approach poses a more imminent and serious threat of harm to the public (mainly to the integrity of California's drinking water supply) - Plaintiffs' proposed injunction or Defendant's emergency regulations (also referred to as the "corrective action plan".) The corrective action plan essentially create an "en masse" administrative proceeding, grouping wells together based upon the quality of water in their associated aquifers (and thus, the risk of contaminating drinking water), and require operators to establish their entitlement to an exemption by certain deadlines. (See Turner Decl. Exs. B, G.) The plan was devised in cooperation with the U.S. Environmental Protection Agency, which since 1983 has supervised DOGGR's enforcement of the SWDA pursuant to a grant of primacy. (Id. Exs. B, C.) Defendant notes that the EPA expressly contemplated that the corrective action plan would not supplant, but complement, DOGGR's existing authority to take corrective action. (Turner Decl. Ex. C at p. 3.) Plaintiffs do not dispute this.

The court agrees with the general proposition that DOGGR's failure to enforce the SWDA's exemption requirements threatens irreparable harm (contamination) to the State's underground drinking water supply. The court also accepts Plaintiff's evidence that once an aquifer is contaminated, it cannot be remediated. However, these are general propositions, and do not constitute evidence of the risk of imminent harm to protected (non-exempt) aquifers. Plaintiffs' evidence - generalized admissions by the DOGGR that it has not effectively enforced existing law and statements concerning actual harm which are, at best, ambiguous - is unpersuasive. They repeatedly cite to the Bishop Testimony; however, Mr. Bishop admits that "[w]e have not found...that an active drinking water well has been impacted...." Similarly, in the course of Defendant's review under the emergency regulations, in which it has prioritized noncompliant injection wells with the highest risk of contamination, DOGGR has found no contamination. (Zakim Decl. Ex. E at p.5.) Defendant and intervenors contend that most of the wells that have not already been shut-in are low-risk wells, due to the poor quality of the water there (e.g., they are located in hydrocarbon bearing zones). Plaintiff argued at the hearing that this is not true, but admits that no one knows, because the issue has not been studied by DOGGR. Lack of knowledge does not establish a risk of imminent harm.

On the other hand, the potential harm to the public, if this court were to vacate the emergency regulations and order DOGGR to proceed against over 2,000 (and possibly up to 6,100) wells via individual enforcement actions is substantial and almost certain to occur. The costs and strain on State resources, if the State were ordered to proceed in this fashion, would be significant. Nor would relief be immediate or certain. As DOGGR explained at the hearing on this motion, regular shut-in orders could be stayed until all appeals are exhausted; the time it would take to issue shut-in orders and complete the administrative appeals process on a case-by-case basis would likely extend beyond the outer deadlines under the emergency regulations (corrective action plan). Thus, in cases where DOGGR does not already have evidence to support an actual threat to the environment, administrative enforcement actions would cost more, and provide less certain relief, in a longer amount of time, than the emergency regulations.

Plaintiffs argue that DOGGR could issue emergency (as opposed to regular) shut-in orders, which have immediate effect and cannot be stayed. For this, DOGGR must have evidence of an actual threat to the public/environment and thus, must investigate the wells/aquifer at issue before issuing the order. (See, e.g., Supp. Zakim Decl. Ex. W.) Plaintiffs suggested at the hearing that DOGGR already has a factual basis for issuing emergency shut-in orders for thousands of wells, but this contention is based upon the admission that many aquifers are nonexempt (and/or that wells lack permits), not an admission of any actual threat to drinking water. Not only would substantial resources would be required to request immediate shut-ins of each of the injection wells at issue, more resources would then be required to litigate the administrative proceedings. Given the substantial losses imposed by immediate shut-ins of thousands of wells across the state (see, e.g., Piron Decl. ¶¶ 20-22, Coppersmith Dec. ¶¶ 20-23; Rosenlieb Decl. ¶¶ 20-23; Butler Decl. ¶¶ 17-20), it is likely that blanket emergency shut-in orders will

be vigorously contested. (By comparison, the Energy Company intervenors noted that they did not challenge the DOGGR's selective determination, under the emergency regulations, that the 23 wells immediately needed to be shut down.) Thus, enforcement via with individual administrative proceedings is plainly far more costly, less efficient, and - overall, when dealing with thousands of wells - less effective.

Plaintiffs' proposed injunction would also force DOGGR to attempt to proceed with respect to thousands of wells at once and thereby deprive DOGGR of the ability to focus its resources on the wells posing the greatest risk to aquifers that are most likely to contain drinking water. This would not result in the orderly or effective enforcement of the SWDA or benefit the public.

The emergency regulations address a difficult situation (admittedly one caused mainly by DOGGR) in a systematic, rational fashion. They address the EPA's concerns, and thus avert (at least, for now) the threat that the EPA will rescind California's "primacy," which could result in less effective enforcement in the near-term. They use DOGGR's limited resources wisely by pursuing compliance en masse and minimizing unnecessary litigation. They promise to speed compliance and incentivize cooperation by providing fair notice to industry operators. In so doing, enforcement via the emergency regulations also appears likely to minimize collateral harm to the public, including the impact on California's economy of an immediate, across-the-board shut-down of injection wells. (See, e.g., Piron Decl. ¶¶ 20-22, Coppersmith Dec. ¶¶ 20-23; Rosenlieb Decl. ¶¶ 20-23; Butler Decl. ¶¶ 17-20.) Vacating the emergency regulations and forcing DOGGR to proceed in the manner preferred by Plaintiffs appears likely to cause greater harm to the environment than allowing the corrective action plan to remain in place.

CONCLUSION. In sum, contamination of nonexempt drinking water aquifers is theoretically possible and could occur prior to judgment, absent an injunction. However, Plaintiffs bear the burden of proof. As noted almost a century ago, and repeated countless times since, "[t]o issue an injunction is the exercise of a delicate power, requiring great caution and sound discretion, and rarely, if ever, should be exercised in a doubtful case. 'The right must be clear, the injury impending and threatened, so as to be averted only by the protecting preventive process of injunction.'" (Willis v. Lauridson (1911) 161 Cal. 106, 117; accord Anocora-Citronelle Corp. v. Green (1974) 41 Cal.App.3d 146, 148; West v. Lind (1960) 186 Cal.App.2d 563, 569.) On this record, the threat of such contamination is theoretical and speculative and plainly outweighed by the other harms, discussed above, which are virtually certain to occur if an injunction issues. Thus, the motion is DENIED.

Dated: 07/16/2015

facsimile

Judge George C. Hernandez, Jr.

SHORT TITLE:	CASE NUMBER:
Center for Biological Diversi VS Califonia Department of Con	RG15769302

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Order

Superior Court of California, County of Alameda
Rene C. Davidson Alameda County Courthouse

Case Number: RG15769302
Order After Hearing Re: of 07/16/2015

DECLARATION OF SERVICE BY MAIL

I certify that I am not a party to this cause and that a true and correct copy of the foregoing document was mailed first class, postage prepaid, in a sealed envelope, addressed as shown on the foregoing document or on the attached, and that the mailing of the foregoing and execution of this certificate occurred at 1225 Fallon Street, Oakland, California.

Executed on 07/16/2015.

Leah T. Wilson Executive Officer / Clerk of the Superior Court

By Yestrada Digital
Deputy Clerk

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IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA
IN AND FOR THE COUNTY OF ALAMEDA

CENTER FOR BIOLOGICAL DIVERSITY AND SIERRA CLUB,

Plaintiffs/Petitioners,

v.

CALIFORNIA DEPARTMENT OF CONSERVATION, DIVISION OF OIL, GAS, AND GEOTHERMAL RESOURCES, et al.,

Defendants/Respondents,

AERA ENERGY LLC, et al.,

Respondents-in-Intervention, and

WESTERN STATES PETROLEUM ASSOCIATION, et al.,

Respondents-in-Intervention.

Case No: RG15769302

ASSIGNED FOR ALL PURPOSES TO JUDGE GEORGE C. HERNANDEZ, JR. DEPARTMENT 17

UPDATED JOINT COMPLEX CASE MANAGEMENT STATEMENT

Date: December 9, 2015
Time: 2:30 p.m.
Dept: 17
Judge: Hon. George C. Hernandez

Action Filed: May 7, 2015
Trial Date: None set

The parties ("Parties") to the above-entitled action submit this UPDATED JOINT COMPLEX CASE MANAGEMENT STATEMENT pursuant to the Court's Case Management Order dated October 1, 2015, the General Guidelines for Litigating in Department 17 and the case management statement instructions provided in the Court's order dated June 11, 2015.

A. Background of case.

Plaintiffs Center for Biological Diversity and the Sierra Club ("Plaintiffs") have brought this action against the California Department of Conservation, Division of Oil, Gas and Geothermal Resources ("DOGGR") challenging DOGGR's authorization of oil industry injections of wastewater and other fluids into California aquifers that Plaintiffs allege are protected under the Safe Drinking Water Act ("SDWA") and require exemptions before injections into them are lawful. DOGGR has primary responsibility for the administration of SDWA requirements governing these underground injections in California, known as "Class II" injections, pursuant to a grant of primacy from the U.S. Environmental Protection Agency to DOGGR in 1983.

Plaintiffs' complaint, filed on May 7, 2015, contains two causes of action. First, Plaintiffs seek declaratory relief under the California Administrative Procedure Act ("APA"), alleging that DOGGR has violated the APA by promulgating emergency regulations titled the "Aquifer Exemption Compliance Schedule Regulations," which allow Class II injections into aquifers lacking exemptions to continue until as late as 2017. Second, Plaintiffs seek a writ of mandate declaring that DOGGR has violated its mandatory duty to prohibit Class II injections into non-exempt aquifers. Plaintiffs' requested relief asks this Court to void DOGGR's emergency regulations and issue a writ that requires DOGGR to take all actions necessary and available to it to immediately meet its mandatory duty to prohibit Class II injections into protected aquifers. Additional, detailed descriptions of the case's factual background were filed with this Court by Plaintiffs in their May 14, 2015 Motion for Preliminary Injunction, as well as by Defendant DOGGR in its June 19, 2015 Opposition to Plaintiffs' Motion for Preliminary Injunction. (See Pl. Mot. for PI (May 14, 2015) at 1-4; Def. Opp. to PI (June 19, 2015) at 2-4.)

Respondents-in-Intervention Aera Energy LLC, Berry Petroleum Company LLC, California Resources Corporation, Chevron U.S.A. Inc., Freeport-McMoRan Oil & Gas LLC, Linn Energy

Holdings LLC, and Macpherson Oil Company ("Energy Companies") and Western States Petroleum Association, California Independent Petroleum Association, and Independent Oil Producers Agency ("Industry Groups") filed motions to intervene on May 29, 2015, and were granted intervention on June 16, 2015. Respondents-in-Intervention also described the case background in their Oppositions to Plaintiffs' Motion for Preliminary Injunction. (Energy Companies' Opp. to Pl. Mot. for PI (June 19, 2015) at 2-6); Industry Groups' Opp. to Pl. Mot for PI (June 19, 2015) at 3-6.)

Defendant DOGGR and Respondents-in-Intervention Energy Companies and Industry Groups ("Opposing Parties") demurred to Plaintiffs' complaint. Following a hearing on September 30, 2015, the Court issued three separate orders on October 5, 2015, overruling the Opposing Parties' three separate demurrers. In its orders, the Court also ordered Opposing Parties to file answers within 20 days of the Court's mailing of its decisions on the demurrers.

DOGGR, Energy Companies, and Industry Groups each filed an answer on October 30, 2015.

B. Parties and their positions.

The Parties to this case are Plaintiffs Center for Biological Diversity and Sierra Club; named defendant DOGGR; and two groups of Respondents-in-Intervention—Energy Companies and Industry Groups.

C. Deadlines and limits on joinder of parties and amended or additional pleadings.

The Parties do not anticipate joinder of additional parties. Plaintiffs reserve the right to move, pursuant to Code of Civil Procedure section 464, for supplementation of the Complaint should new, relevant facts arise. Opposing Parties reserve their respective rights to supplement their answers, file amended answers, or demur to any amended or supplemental complaint.

Opposing Parties request a deadline for Plaintiffs' filing of any motion to amend or supplement the Complaint; specifically, Opposing Parties request that Plaintiffs file any such motion by 20 days after the date the record is certified.

Plaintiffs disagree with this deadline, for the reasons described below.

D. Class discovery and class certification.

There are no class discovery or class certification issues in this case.

E. Proposed schedule for the conduct of the litigation.

Following a call between Plaintiffs and DOGGR on November 19, 2015, the Parties were unable to agree on a proposed schedule for the next steps in the litigation. As described below, they offer alternative courses for case management.

Plaintiffs' position:

Plaintiffs respectfully request that the Court adopt a litigation schedule with specific, enforceable deadlines for a timely disposition of this case, which was served on May 11, 2015 to challenge "emergency regulations" adopted by DOGGR that allow new and ongoing injection by Class II wells into non-exempt, underground sources of drinking water, in some cases until February 15, 2017. Timely resolution of the merits is critical to the issue at the heart of this action, which challenges DOGGR's failure to act in accordance with law and the resulting ongoing injection of oil industry waste and other fluids into protected California aquifers by hundreds and potentially thousands of wells, according to DOGGR's own admissions.

As articulated in its position below, DOGGR will not agree to a negotiated, defined schedule. It has also declined Plaintiffs' offer for immediate assistance to facilitate prompt agreement about the relevant, underlying evidence. Instead, the agency asserts that it cannot estimate how long it will take to complete preparation of relevant documents for Plaintiffs' second cause of action, the section 1085 writ petition.

To enable this litigation to proceed, DOGGR must certify and produce the administrative record for Plaintiffs' APA cause of action. Plaintiffs believe they should not be subject to further delay and prejudice in the case on account of certification or production of the APA record, as the necessary contents for DOGGR's emergency rulemaking file is statutorily defined and, by law, a

copy already should have been compiled and certified. (See Gov. Code § 11347.3, subds. (a), (b) [defining contents of record]; § 11346.1, subd. (e) [stating that an agency, within 180 days of adoption of an emergency rule, shall transmit the rulemaking file and a certification of completeness to the Office of Administrative Law].)

Likewise, Plaintiffs believe they should not be subject to further delay and prejudice in the case on account of producing the "record" for Plaintiffs' section 1085 writ petition. The writ statutes do not define the record for a section 1085 proceeding (see 1 Cal. Civil Writ Practice (4th ed. 2013) §7.4 p. 166), and no official administrative record exists for Plaintiffs' petition here, which alleges that DOGGR has failed, wholesale, to undertake mandatory duties required by law. Under such circumstances, the case may proceed on the basis of stipulations, judicially noticed documents, and supporting declarations and exhibits. (*Ibid.*; see also *id.* at §§ 7.1; 7.5; 7.6; 7.9; 7.18 pp. 164-65, 167, 169, 176-77.)

Plaintiffs intend to provide to Defendant DOGGR and Respondents-in-Intervention—prior to the conference scheduled on December 9, 2015—an index and accompanying electronic files for inclusion in the "record" for Plaintiffs' section 1085 writ petition. These records might serve as the foundation for an initial stipulation, with additional "record" materials to be addressed as necessary through motions for judicial notice, declarations, and potentially further stipulation. Plaintiffs' proposed approach facilitates immediate discussion between the Parties about the scope of relevant evidence, and creates a path for the Parties to move forward with briefing by using the tools available for introducing evidence in a writ dispute. By insisting that DOGGR must maintain full control of a record, where the scope of that record is wholly undefined by law, while offering no timetable for completion, and anticipating the need for additional time for comment and response, DOGGR already is signaling that disputes about evidence are inevitable, and may likely involve the Court. Plaintiffs will be severely prejudiced if forced to wait indefinitely for preparation of an

undefined record that may nevertheless result in dispute and this Court's involvement. Negotiation around scope of "record," stipulations and documents to be included as evidence now will minimize the burden on judicial resources later, as well as obviate unnecessary delay.

Plaintiffs propose a truncated timeframe for preparing their own opening brief and reasonable page limits for all Parties. Based on the foregoing considerations, Plaintiffs respectfully request that the Court adopt the following schedule and briefing constraints:

a. On or before January 8, 2016 (i.e., within 30 days of the case management conference), Defendant DOGGR will certify the administrative record for Plaintiffs' APA cause of action, lodge it with the Court, and provide it electronically to Plaintiffs and the Respondents-in-Intervention. By the same date, if agreement is reached, the Parties will submit a stipulation identifying "record" materials for Plaintiffs' writ petition, along with accompanying documents.

b. Within 20 days, by January 28, 2015, Plaintiffs will file their opening papers addressing the merits and any accompanying evidentiary motions, including any motion addressing the scope of the APA record. Plaintiffs' memorandum of points and authorities shall be limited to 25 pages. By this date, Respondents-in-Intervention may file their own motions, if any, that challenge the scope of the APA record.

c. Within 30 days, by February 29, 2016, Defendant DOGGR and Respondents-in-Intervention will file their opposing papers. DOGGR's memorandum of points and authorities shall be limited to 25 pages; Energy Companies and Industry Groups shall file either a joint memorandum or two separate memoranda, in either case not to exceed 25 pages in total. Opposing Parties also will file evidentiary motions in support of their merits briefing, if any, and responses to any of Plaintiffs' evidentiary motions. By this

date, Defendant DOGGR also will respond to motions by Plaintiffs or Respondents-in-Intervention, if any, challenging the scope of the APA record.

d. Within 20 days, by March 21, 2016, Plaintiffs will file their reply papers on the merits, not to exceed 30 pages in total length, along with any final evidentiary motions. Replies in support of Plaintiffs' initial evidentiary motions, including any motion addressing the scope of the APA record, if any, would be due the same date, along with any responses to evidentiary motions submitted by Opposing Parties. By the same date, replies in support of motions filed by the Respondents-in-Intervention challenging the scope of the APA record, if any, would be due.

e. Within 10 days, by March 31, 2016, Opposing Parties shall file replies, if any, in support of their evidentiary motion(s); response(s) to Plaintiff's final evidentiary motions, if any, would be due the same date.

f. Within 7 days, by April 7, 2016, Plaintiffs shall file replies, if any, in support of any evidentiary motions that were filed contemporaneously with their reply on the merits.

g. Consistent with the foregoing schedule, Plaintiffs request that a hearing date on the merits be set for as soon after briefing as the Court is available to hear this matter.

Plaintiffs request that this Court deny Opposing Parties' request for a 20 day deadline following the certification of a record for Plaintiffs' filing of any motion to amend or supplement the Complaint, as the timing of the emergence of facts warranting amendment or supplementation of the Complaint is not tied to the record and cannot be anticipated.

Plaintiffs further request that this Court deny Energy Companies' request to bifurcate resolution of the action's two claims so as to delay resolution of Plaintiffs' second claim. To the extent Energy Companies wish to bring a dispositive motion regarding Plaintiffs' first claim, they

may do so contemporaneously with the schedule Plaintiffs propose, and file their motion on the date proposed by Plaintiffs for the filing of their opening brief.

Defendants and Respondents-in-Intervention propose the following:

DOGGR's position:

DOGGR believes Plaintiffs' proposed method and schedule regarding record preparation and briefing would seriously prejudice DOGGR for the reasons discussed below. Plaintiffs' proposal to introduce declarations, exhibits, and stipulations as record evidence should be rejected. DOGGR will review any materials sent to it by plaintiffs, and is and has been willing to discuss record preparation issues with plaintiffs and respondents in intervention informally in an effort to avoid involving the Court in a dispute. But, DOGGR is ultimately entitled to have the legality of its legislative regulations and quasi-legislative decisions decided on the basis of an administrative record it certifies. DOGGR proposes that this Court allow DOGGR to proceed with preparing the record in an orderly and expeditious fashion, and set a further case management conference in February or March, 2016.

Since this case was put at issue following DOGGR's filing of its Answer on October 30, 2015, DOGGR has been compiling and indexing an administrative record. As Plaintiffs point out, the record as to the APA cause of action is defined by statute. (See Gov. Code, § 11347.3, subd. (a).) But, as to Plaintiffs' second cause of action, which seeks judicial review of DOGGR's emergency regulations, and also its UIC program generally, the record is necessarily much larger and more complex. Plaintiffs propose separate records for their two causes of action. But, this case has not been bifurcated, and unless it is, it would be burdensome and unwieldy to have two separate administrative records lodged for the Court's consideration.

DOGGR is still gathering documents, but estimates that the record will consist of 6,000-10,000 documents. After the documents are gathered, they will need to be indexed and bate-

stamped. They will also need to be reviewed for privilege and confidentiality. DOGGR, like any state agency, has limited resources. It and the Attorney General's Office are devoting significant employee time and resources to compiling documents and indexing the record in this case. Setting a January 8, 2016 deadline for this task would deprive DOGGR of its ability to prepare a complete and accurate record, and impose an inordinate burden during the winter holidays when many employees have pre-planned time off. DOGGR instead proposes that it continue preparing the record, and that the Court set a further CMC for the agency to apprise the Court of its progress. DOGGR asks that the Court bear in mind that this case is not entitled to statutory preference, and the Court already determined that a preliminary injunction was not warranted pending resolution of the case on its merits.

DOGGR also believes that it would be inappropriate to set a briefing schedule to resolve any disputes over the content of the record contemporaneously with merits briefing. Although not required to, DOGGR proposes to circulate a draft index of the record to the other parties for their review and comment in an effort to avoid involving the Court in a dispute over the contents of the record. If appropriate, DOGGR will consider including additional documents in the record provided by the other parties. If there are disagreements over the proper contents of the record, they can be settled by motions to augment. After the record is certified and lodged, the matter should be set for hearing on the merits with a stipulated briefing schedule and page limits. In the experience of DOGGR's trial counsel, records are frequently prepared in this manner in non-CEQA mandamus actions.

DOGGR appreciates Plaintiffs' offer to assist it with preparation of the record, but ultimately DOGGR must certify the record because it is the agency's decision-making that is being reviewed. DOGGR will review plaintiffs' proposed index and record, but DOGGR is entitled to a record that completely and accurately reflects its decision-making. Plaintiffs cite to a treatise that describes the

inclusion of stipulations, declarations, or exhibits in records when courts review informal or ministerial actions. (See 1 Cal. Civil Writ Practice (4th ed. 2013) §§ 7.1; 7.4; 7.5; 7.6; 7.9; 7.18.) DOGGR does not believe it is legally correct for extra-record evidence to be considered in this case, and will object to the Court's consideration of such evidence. (See *Western States Petroleum Assn. v. Superior Court* (1996) 9 Cal.4th 559, 576, 578 [extra-record evidence is generally not admissible in traditional mandamus actions challenging quasi-legislative administrative decisions; only exception "is to be very narrowly construed"].)

Position of Respondents-in-Intervention:

The Energy Companies plan to file a dispositive motion addressing the first cause of action pled in the complaint, and Industry Groups are considering such a motion. Respondents-in-Intervention believe it would be premature to adopt a briefing schedule before a dispositive motion on the first cause of action is decided.

Respondents-in-Intervention agree with DOGGR's position that Plaintiffs' proposed method and schedule for record preparation and briefing could cause serious prejudice to DOGGR and Respondents-in-Intervention. Because the Energy Companies' dispositive motion applies to the first cause of action and DOGGR is still preparing the administrative record for the second cause of action, the Energy Companies believe the most prudent course would be for the Court to set a further case management conference in March 2016. A case management conference in March 2016 would allow the Court to resolve the Energy Companies' dispositive motion, while also giving DOGGR the proper opportunity to prepare the administrative record for the second cause of action.

F. Identification of all potential evidentiary issues involving confidentiality or protected evidence.

Defendant anticipates that portions of the record may need to be lodged under seal, and that a protective order as to those portions of the record should be issued. (See Pub. Resources Code, §

3234.) Defendant will propose a stipulation and order regarding confidential evidence before the record is lodged.

G. Detailed description of the procedural posture of the case.

All Parties named in the complaint have been served. There are no unserved or unfiled cross-complaints, nor any related actions pending in any jurisdiction.

DATED: December 2, 2015

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PROOF OF SERVICE

I am a citizen of the United States of America; I am over the age of 18 years and not a party to the within entitled action; my business address is 50 California Street, Suite 500, San Francisco, California.

I hereby certify that on December 2, 2015, I served by electronic mail one true copy of the document herein on the persons named below:

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I certify under penalty of perjury that the foregoing is true and correct. Executed on December 2, 2015 in San Francisco, California.

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